Towards Women-friendly Urban Public Spaces: Lesson Learned from Downtown Areas in Egypt and Jordan

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Abstract

Urban design has a profound impact on the activities and functions that take place within a city or community. This study explores the design of public spaces that are welcoming and accessible to women in a specific culture context, with a focus on downtown in Cairo, Egypt, and Amman in Jordan. Women often encounter obstacles when trying to access public spaces, such as safety, limited accessibility, and the influence of cultural norms. The research seeks to identify effective measures for improving safety, inclusivity, and usability for women. The conclusion reveals factors that contribute to creating safer and more inclusive spaces. Habibah Square in Amman highlights the success of accessible infrastructure and community-focused design, while downtown Cairo demonstrates the need for improvements in pedestrian pathways, lighting, and transportation. The study recommends the integration of safety measures, better accessibility, and community involvement to develop public spaces that are culturally sensitive, and women-inclusive in similar cities in terms of culture and urban design.

Keywords: Built Environment; Urban Spaces; Urban Design; Sustainable Development; Inclusive Spaces

1 Introduction

With the rapid urbanization around the world, where cities are projected to host 60% of the global population by 2030, men, women, boys and girls experience their cities differently. Inclusive, safe and sustainable cities especially for women and girls are critical to make sure no one is left behind. Despite the high population and development plans and efforts in the MENA Region, slow progress across multiple indicators have been achieved. It is a fact that on average, women feel less safe in urban areas than men do. Around the world, women spend 3-6 hours per day on unpaid care work, compared to half-2 hours per day for men. This affects different mobility patterns in cities between women and men.

Urban public spaces such as streets, parks and sidewalks, defines urban image and character of a city. They also improve the city's quality of life, and its mobility [1]. However, women and girls in general receive less benefits from urban spaces than men and boys due to barriers and vulnerabilities in the form of lack of basic infrastructure, services and opportunities. Research have shown that women's use of public spaces in urban areas is less than that of men. Additionally, women are often under-represented in the decision-making processes, having less representation in urban planning, and development processes [2].

Public Spaces are not designed neutrally, limiting the inclusion of vulnerable groups such as women and girls [3].The fact that urban planning often overlooks the specific needs for women and girls and other minorities results in limiting the accessibility of public spaces to these groups.

As women perceive and use public spaces in cities differently, they often face many challenges to undergo their daily life routine. Women's often have higher responsibilities in caring for children, elderly and family members, leading to higher needs for transportation that can accommodate their needs.

This has led cities to become "gendered spaces," primarily designed with men in mind, despite being home to diverse populations with varying requirements. Women's mobility and access to urban areas are often constrained by disjointed planning and a lack of inclusive design. For example, public transportation systems frequently prioritize male commuting patterns, overlooking the diverse travel needs of women, such as accompanying children, attending healthcare appointments, or shopping during non-peak hours.

In rapidly urbanizing regions of the Global South, challenges are intensified by inadequate safety infrastructure and entrenched social inequalities in public spaces [4, 5]. Despite efforts such as policy reforms and awareness campaigns, the built environment continues to reinforce gender inequities, restricting women's access to public spaces and their basic right to the city [6].

The research stems from UN sustainable development goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable, which aims to ensure access to safe and affordable housing, investment in public transport, creating green public spaces, and improving urban planning and management in a participatory and inclusive manner.

2 Objectives and Methodology

This study is based on the fact, as previously mentioned, that women face challenges in using urban public spaces, compared to men, limiting their inclusion and participation. The research aims to explore measures in the design of urban public spaces to be safe, inclusive, and welcoming for women in Egypt and similar countries.

The research questions include:
- What are the aspects that contribute to women inclusion in downtown areas in Egypt and similar countries?
- What are the key aspects that require focus in downtown areas in Egypt and similar countries?
- What are urban design aspects that are culture-based and can be used for studying and developing public spaces in Egypt and similar countries?

This study adopts an exploratory approach to examine how the built environment influences women's inclusion in public spaces within the local context. Given the absence of established guidelines or criteria specifically addressing gender-sensitive urban design in the studied areas, the research does not aim to compare case studies against a predefined model. Instead, it seeks to identify spatial and design factors that impact women's accessibility, mobility, and sense of safety in urban environments. By exploring real-world examples, the study provides insights into how physical and social aspects of public spaces either facilitate or hinder women's participation. The findings contribute to building foundational knowledge that can inform future project-based research and development of public spaces in the region.

The study begins with a background from literature on the challenges in women-inclusive urban public spaces, and the global efforts. Then it discusses the cultural context of women inclusion in urban spaces. It then explores two examples of public spaces, examining factors such as accessibility, safety, and amenities that affect women's use of these spaces. Through this approach, the research identifies key factors that contribute to creating women-friendly urban spaces and to propose recommendations for improving public space design to be more inclusive and accessible to women in similar cities.

The research explores downtown areas in Cairo and Amman, investigating the cultural, social, and physical factors shaping women's experiences in these spaces.

Amman and Cairo were chosen for this study due to their shared cultural and climatic characteristics, making them ideal candidates for a exploring the cultural context of urban public spaces in terms of women and girls' inclusion. Both cities are steeped in rich historical traditions and serve as cultural and economic centers in their respective countries. This shared heritage plays a significant role in shaping the design and use of public spaces, particularly in how social norms influence interactions and accessibility for women. In terms of climate, both cities face hot, arid conditions typical of the region, which greatly affect urban design. Solutions such as incorporating shade, natural ventilation, and heat-resistant materials are essential for ensuring that public spaces are functional and comfortable in these environments.

The downtown areas of both cities also exhibit similar urban design features, including a blend of historical architecture and modern developments, narrow streets, lively public squares, and a mix of residential, commercial, and governmental buildings. These similarities provide a solid basis for examining how public spaces can be improved to be safer and more inclusive for women.

Studying Amman and Cairo allows the identification of common challenges and effective strategies for creating more inclusive urban environments. The insights gained from these cities can be valuable for other regions with similar cultural and climatic contexts.

By addressing challenges such as safety concerns, limited accessibility, and social exclusion, the study seeks to provide a deeper understanding of the barriers facing women in urban public spaces. It also highlights learned lessons

and adaptable strategies that can serve as models for other urban contexts. The findings aim to guide urban designers, city planners, and architects in creating public spaces that promote women inclusion, align with cultural context in Middle Eastern countries such as Egypt and Jordan.

3 Background

3.1 Women and Public Space

Public spaces are shared areas, both indoor and outdoor, accessible to the community. These spaces have been defined in various ways, often emphasizing their openness and purpose [7]. For the purpose of this research, public space is considered as an area available to all individuals at no cost, where interactions with strangers are common. This contrasts with private or domestic spaces, which have restricted access [8, 9].

Many public spaces fail to address women's socio-cultural needs, such as privacy. Women's routines and behaviors are shaped by societal and cultural norms, whether consciously or unconsciously, which also affect their relationship with space. The specific needs and challenges facing women as users in public spaces should be addressed intentionally in the process of urban design, to ensure that the cultural needs for women are understood and considered in a context-based approach.

. These includes factors that influence women's mobility, such as safety, accessibility, and proximity [10]. The use of public space by women has been the focus of numerous studies. Scholars have analyzed women's experiences and perceptions of public spaces across a range of fields, including history, sociology, anthropology, and geography. These studies have looked into how women view, experience, and prefer public spaces, which have often been seen as male-dominated in many societies. Research on women's engagement with public spaces has covered a variety of issues, such as accessibility, safety perception, and their attitudes toward different types of public spaces. Therefore, it is important to consider how socio-cultural values impact women's choices regarding the use of public spaces and their participation in public life [9].

Urban spaces often reflect societal power dynamics and cultural norms, making them inherently gendered as theyoften get dominated by masculine routines and activities, while women's access is constrained by societal expectations and safety concerns [11]. This masculinization of urban spaces fosters a sense of exclusion for women, who often perceive these areas as unsafe due to factors in the built environment like inadequate lighting, limited visibility, and the presence of concealed or dangerous spots [12].

These factors influence women's sense of ownership and agency in urban environments. The lack of appropriate facilities, such as accessible public toilets and well-lit streets, perpetuates their exclusion. Historically, women have been relegated to the private sphere, which has shaped urban design, often failing to meet their needs [13]. This systemic neglect often reinforces the perception of urban spaces as unsafe and unwelcoming for women, limiting their freedom to navigate the city.

There are different perspectives on how gender differences affect the use of space. From an evolutionary perspective, gender disparities in modern societies are seen as a legacy of male dominance from pre-industrial times. In those societies, men's physical strength and authority were critical for survival. Men took active roles outside the home, managing public spaces to protect their communities from external threats. Their biological advantages, such as freedom from the constraints of pregnancy, childbirth, and lactation, further justified their dominant position in the use of space. As a result, it became natural for men to be socialized to take charge, be assertive, and control outdoor spaces more than women.

From a functional perspective, gender differences in space use are linked to family roles. The stability of the family unit required complementary roles from both husbands and wives. Men were expected to be the breadwinners and protectors, spending more time in public spaces, while women were responsible for emotional support and child-rearing. This division of labor helped maintain a stable family structure.

Gendered spaces refer to an urban space where social, cultural, and design elements influence how different genders experience and navigate the space or the city.

In countries like the U.S., where women are more frequently present in public spaces, gender-based restrictions can still be observed in certain contexts. For example, men often dominate spaces like pubs and bars, and when women do frequent these spaces, they tend to do so in a more reserved manner. This gendered division of space can also influence people's perceptions and behavior in public areas. A study in China found that men and women used public spaces differently, with women showing more caution and preferring more space in areas like elevators, stairs, and parking lots. These traditional limitations on women's use of public space in China often lead to feelings of insecurity, affecting their cautious approach to these spaces [14].

3.2 Urban design and Women Inclusion

The design of urban environments plays a significant role in ensuring the inclusion of women. Features like natural surveillance, active building façades, and mixed land use can improve safety by increasing visibility and encouraging social interaction. Natural surveillance, which involves creating spaces that allow for passive observation, helps deter criminal behavior by making detection more likely. Active façades, with windows and doors that connect buildings to the street, further contribute to safety and community engagement [15].

Creating safer urban environments requires a holistic approach that integrates physical, social, and cultural dimensions. Urban design strategies, such as increasing tree cover and enhancing street lighting, have been shown to improve perceptions of safety [16]. Trees and greenery not only provide aesthetic value but also promote social interaction and natural surveillance, reducing opportunities for crime [16]. Similarly, well-lit streets and public spaces enhance visibility and foster a sense of security, encouraging greater use of urban areas by women [12].

Gender-responsive participatory planning is another critical strategy for addressing women's safety. By involving women in the decision-making process, urban planners can better understand and address their unique needs and concerns [13]. This approach ensures that public resources are allocated equitably and that urban spaces are designed to be inclusive and accessible for all.

On the other hand, poorly designed spaces with areas of concealment and limited escape routes increase feelings of vulnerability, particularly for women [17]. Concealment refers to spots that offer hiding places for potential offenders, such as dense vegetation or poorly maintained structures. Entrapment involves physical barriers that restrict escape routes, making a space feel more dangerous. Proper lighting is also crucial; well-lit areas enhance visibility and discourage criminal activity, while poorly lit spaces heighten fear and limit movement [12].

Safety perceptions are subjective and influenced by factors like gender, age, and cultural context. Women, in particular, tend to report higher levels of fear in urban environments, which affects their behavior and movement patterns. For example, women may avoid certain areas, take longer routes, or pay extra for private transportation to feel safer [13]. These adaptations not only limit their freedom but also reinforce the idea that cities are unsafe for women.

Fig. 1: Six Strategies used by Women looking for Safety in Urban Areas [18]

In many developing countries, the rapid growth of urban areas has worsened challenges related to women's safety. High population densities, inadequate infrastructure, and poorly maintained public spaces heighten the risk of violence and harassment [4]. As cities grow, the need for accessible and inclusive public spaces becomes even more urgent. However, urban planning often prioritizes economic development over social equity, leaving the needs of marginalized groups, particularly women, unmet [5].

Public transportation, which serves as a vital resource for many women, often becomes a space where harassment occurs, further limiting their access to economic and social opportunities. The absence of gender-sensitive infrastructure, such as women-only carriages or well-lit bus stops, worsens these challenges [19].

Global initiatives like the UN Women's Safe Cities and Safe Public Spaces Programme emphasize the need for gender-responsive urban planning and design. Tools such as women's safety audits, public awareness campaigns, and gender-disaggregated data collection are essential for fostering inclusive urban environments. Safety audits, for example, involve assessing public spaces to identify and address factors that contribute to insecurity, such as poor lighting or lack of signage [13].

3.3 The Cultural Context in the MENA Region:

Sociologists argue that cultural and social organization are key drivers of gendered spatial practices. In Arab societies, traditional family structures assign men the responsibility for providing material well-being and ensuring the protection of family members, while women are expected to offer emotional support.

However, cultures vary within the region. For example, Nubian women have a more dominant role in their communities. In many Nubian households, women head the family and play a crucial role in the economy, as they are the primary food producers and domestic workers. With more than 60% of men migrating abroad, Nubian women have developed a significant presence in both the home and public spaces. This example shows that economic participation and family roles are important factors influencing the gendered use of space, even in more conservative societies [14].

Women represent a key yet underutilized asset in the MENA region's pursuit of sustainable and inclusive growth. Unlocking their full potential and ensuring their active participation in both public and economic spheres are crucial for enhancing competitiveness and fostering more equitable policies and legislation. Providing equal opportunities in these domains is essential not only for building a fairer society and upholding human rights but also for promoting more inclusive and well-informed decision-making [20].

Several projects have been carried out to ensure safe and inclusive urban spaces in the region. The HAYA programme in Palestine in the West Bank and Gaza aimed to provide secure communities for women and girls. UN-Habitat supported the launch of the Gaza promenade for women, girls and families. Another project lies in Hay Hlel district in Tunisia, where women sell their hand-made potteries in public spaces in an informal settlement. UN-Habitat supported the development of public spaces to be accessible for girls, women and children, providing a better working and living condition [1].

4. Women Inclusion in Downtown Areas

Efforts to improve women's safety in urban spaces have seen varied implementation across the Region. In Egypt, Cairo, the Safe Cities for Women initiative, launched by UN Women in collaboration with national organizations, has focused on transforming public spaces through community engagement and awareness campaigns. Measures include enhanced street lighting, the presence of security personnel, and the introduction of women-only transportation options [6]. These efforts aim to mitigate harassment and ensure women's equal access to public spaces.

In Amman, Jordan, urban planning projects have emphasized the importance of inclusive design to reduce harassment in public areas. Specific interventions include the redesign of public parks to improve visibility and accessibility and the installation of surveillance cameras in high-risk areas [5]. These strategies aim to foster a safer urban environment while encouraging women's participation in public life [4].

Despite these regional efforts, challenges persist. Limited resources, cultural barriers, and the need for sustained community engagement often hinder the long-term success of these initiatives. However, these examples highlight the potential for targeted urban planning and policy interventions to enhance women's safety and access to public spaces.

In this section, we explore the case of downtown Cairo and downtown Amman in terms of the aspects of the built environment in both areas that promotes or hinders women participation and use of these spaces.

Both Cairo's and Amman's downtown areas (figure 2) share aspects in the cultural, social, climatic and economic contexts. These aspects were considered due to their contribution to shaping public spaces. The use of public spaces is shaped by cultural traditions, gender roles, and historical influences. Understanding these factors helps in analyzing how inclusivity, mobility, and safety concerns vary in different urban settings. Social interactions and public gathering habits define how spaces are used by different groups. This factor is crucial for studying gender-sensitive urban design and public safety. While climate directly affects outdoor space usage, influencing urban design solutions like shaded areas, pedestrian-friendly pathways, and cooling infrastructure. Finally, downtowns play the role of economic hubs where commercial and informal activities thrive. Investigating these areas helps assess how economic structures impact women's access to and experiences in public spaces.

Fig. 2: Maps showing the focus of the examples: Downtown Cairo (left) and Downtown Amman (right)

By comparing Amman Downtown and Cairo Downtown, this study provides insights into how urban design, social norms, and climate influence the accessibility and inclusion of public spaces, particularly for women. Table 1 provides some key similarities between the two areas according to the mentioned aspects.

Table 1: Comparison Table: Amman Downtown, Jordan & Cairo Downtown, Egypt

Factor	Amman Downtown, Jordan	Cairo Downtown, Egypt	Similarities
Cultural Context	Historic and traditional urban core with strong cultural influences. Social interactions in public spaces are shaped by cultural norms emphasizing family and community.	Rich historical downtown with a mix of European architectural style. Public spaces play a crucial role in social and economic life.	Both downtowns are historically significant and serve as cultural hubs where public space usage is influenced by traditions and social norms.
Social Dynamics	A mix of informal markets, commercial areas, and public gathering spaces where gender roles influence mobility and access.	Densely populated, diverse, and socially active public spaces, including street markets and cafés.	Social interactions and gender dynamics in both cities provide a strong basis for analyzing how public spaces are experienced differently by men and women.
Climate	Semi-arid climate with hot, dry summers and cool winters. The urban environment influences how people use public spaces, with shaded areas being crucial for comfort.	Hot desert climate with extremely hot summers and mild winters. High temperatures affect urban mobility, making shaded and well-ventilated spaces essential for comfort.	Climate affects pedestrian movement, urban design, and accessibility. Exploring these cities helps analyze how the use of public spaces is shaped by climate.
Economic Importance	A key economic center with a combination of traditional souks, modern retail spaces, and tourism-driven businesses. Informal economies thrive in public spaces.	A major economic hub with a mix of modern commercial districts, historic marketplaces, and high informal sector activity. Public spaces play a role in employment and economic exchange.	The economic significance of downtown areas in both cities highlights how public spaces serve as vital centers for commercial and social life, affecting women's mobility and safety.

4.1 Habiba Square, Amman

Amman's public spaces have a unique character, deeply shaped by the city's cultural and social context. These spaces are not just physical areas but places where lives connect and interact, influenced by gender, social norms, and accessibility. When we think about women's experiences in these spaces, it's clear that urban planning hasn't always considered their specific needs. To build a more inclusive city, we need to understand how men and women use and experience public spaces differently.

A key factor in shaping how women experience public spaces in Amman is the demand for gender-segregated areas. This is especially true for young, single men, who are often seen as troublemakers. As a result, some parts of Amman enforce policies that exclude young men, reinforcing gender separation. Men typically prefer recreational spaces or areas that are easily accessible by car, while women tend to seek out green spaces, clean environments, and places with shopping options. Women, particularly those with children, also look for spaces that are child-friendly. Both men and women appreciate seating options, but for women, having a variety of comfortable and safe seating arrangements is especially important, whether they are alone, with family, or friends.

However, women in Amman face several obstacles when it comes to fully enjoying public spaces. Transportation is a big issue, as many women do not own or drive cars, relying on taxis or unreliable public transport. The lack of clean, well-maintained public restrooms also limits how long women can stay in public spaces. This problem is even more significant for women with children, who face additional challenges like carrying heavy loads or navigating steep stairs. This lack of accessible infrastructure discourages many women from spending long periods outside, particularly at night when safety concerns become more pronounced.

Amman's urban landscape is also shaped by food landmarks that, while not officially classified as public spaces, serve as important social hubs. One such example is Habibah Square, located near the famous Habibah sweet shop in Wast Al Balad (Downtown). What began as a place to buy sweets has grown into a lively public gathering spot, attracting a wide variety of people. This example shows how Habibah Square

has become a model for public space planning in Amman, especially in its ability to create a shared social space for different groups.

What makes Habibah Square stand out is its reputation as a safe and welcoming space, particularly for women from more conservative backgrounds. The square is comfortable and secure, allowing both men and women of all ages to enjoy it together. Informal guardians such as cleaners, vendors, and regular visitors, along with a visible police presence, help maintain the square's safety. Its central location and walkability make it easy for people to stop by while running errands. While there are no public restrooms, nearby cafes and restaurants provide alternatives. The square is also stroller-friendly, with smooth pavements and accessible seating.

The physical layout of Habibah Square, situated between the Arab Bank building and King Ghazi Street, creates an inviting open area that extends outdoors from the Habibah shop. This small space, often called "the standing Habibah," has become a popular spot for customers to enjoy their knafeh, contributing to a communal atmosphere. The lack of formal signage adds to its charm, as visitors often discover the square through word of mouth or by noticing the activity around it. The square is dynamic, with street performances and acoustic concerts that enhance its lively vibe.

A major reason for Habibah Square's success is its positive social image. The space is seen as respectable and safe, which allows people to engage in behaviors that might not be accepted in other public spaces in Amman. For instance, women feel comfortable sitting on the ground while eating takeout or chatting with strangers, which would typically be frowned upon in other areas. This sense of comfort creates a more inclusive and open atmosphere.

Though the square is generally considered a safe space, some women still prefer more privacy, especially to avoid unwanted attention. This is evident in the way some women gravitate toward quieter areas of the square, like behind the Arab Bank building, where they feel more shielded from public scrutiny. Despite this, the informal guardianship system helps maintain order and prevent disruptive behavior, such as harassment.

The square's success is also linked to its accessibility and connections to other parts of the city. Its central location makes it easy to reach by various forms of transport, including public buses and taxis. The pedestrian-friendly environment, with smooth pavements and low curbs, ensures that space is accessible to all, including those with strollers or mobility challenges. While the surrounding narrow streets may feel unsafe, particularly at night, the square itself remains a lively hub, providing a safe refuge for those looking for a place to relax or socialize.

In addition to its physical features, the affordability and inclusivity of Habibah Square play a crucial role in its popularity. The low prices make it accessible to people from all walks of life, and visitors don't need to spend money to enjoy the space. This openness creates a sense of community, where people from different socioeconomic backgrounds can gather and share space without judgment. The square also serves as a meeting point for people of various generations and backgrounds, fostering social connections across the city.

Habibah Square stands as a successful example of a public space that meets the needs of a diverse group of people, particularly women, in Amman. Its reputation for safety, accessibility, and inclusivity, along with its central location and vibrant social atmosphere, makes it a model for future public space planning in the city. By studying the experiences and successes of Habibah Square, urban planners can learn how to create more spaces that encourage social interaction, inclusivity, and safety for everyone.

This example highlights the key factors that make Habibah Square a woman-friendly and safe space, emphasizing thoughtful design and community involvement. Features such as well-lit pathways, clear signage, and strategically placed seating areas enhance both safety and comfort[21].

4.2 Downtown Cairo, Egypt

Efforts are ongoing in Egypt to provide better experience for women using urban public spaces. Programs like Safe Cities for Women aim to create safer, more inclusive environments through collaboration between local and international organizations. These initiatives focus on raising awareness, engaging communities, and making key changes to policies and infrastructure to tackle the root causes of insecurity. However, ensuring the long-term success and expansion of these programs remains a challenge, particularly in areas with limited resources.

Several measures have been introduced to make public spaces more accessible and secure for women. For instance, women-only subway cars and private beaches for women have been implemented to provide safer spaces. The Safe Cities Programme, in particular, works on creating safe public spaces, improving services, and developing laws and frameworks. Despite these efforts, there are still gaps that need to be addressed [22].

The Downtown District of Cairo is a notable area in terms of accessibility. It is well-served by various transportation options, including the metro, buses, and cycling lanes, making it easy for both residents and visitors to move around. The district's pedestrian pathways are generally wide and well-maintained, and there are provisions for cyclists, such as bike racks, which are not commonly found in other parts of Cairo. However, the absence of public bathrooms remains a significant issue, especially for women and people with limited mobility. The location is highly accessible by underground, taxis and a strong ground transportation network.

The main streets are adequately lit, but many side streets suffer from poor lighting, affecting the perception of safety for women, particularly at night. The open layout of the district offers a sense of security during the day, but narrow backstreets and crowded areas at night increase the sense of vulnerability. In high-traffic areas like Tahrir Square, the presence of public cameras and security personnel offers reassurance.

Street amenities, such as trash bins, seating areas, and other public furniture exist but require development to enhance the comfortand usability of the public spaces. Despite these issues, there have been efforts to introduce greenery, particularly in Tahrir Plaza, where trees and flower beds have been planted. However, the overall amount of greenery in downtown Cairo remains limited.

Social aspects also play a role in shaping the experience of public spaces in this district. Street vendors contribute to the vibrant but bustling atmosphere. The district's mix of governmental, educational, cultural, commercial, residential, and tourist, in addition to various options and spaces for users makes it a dynamic area, providing a vibrant atmosphere.

One significant issue in Tahrir Square, and other areas of the district, is the lack of artificial shade. This is especially problematic for women and girls, who may avoid these areas during the hot summer months due to discomfort and health risks. Adding shade elements, such as trees or shelters, would improve the livability of these spaces, making them more comfortable and inclusive for everyone.

While the Downtown District has several strengths, such as good accessibility, open layouts, and a variety of amenities, it also faces substantial challenges. These include inadequate lighting, insufficient public amenities, and safety concerns that need to be addressed through targeted interventions. Only then can the district reach its full potential as a safer, more inclusive space for all [23].

5 Discussion

Based on the examples of Habibah Square in Amman and Cairo Downtown, key measures were identified as guidance for designing women-friendly public spaces in these countries. These two cases provided valuable insights into the strengths and weaknesses of urban spaces in contexts with shared cultural characteristics, respecting local culture and societal dynamics.

The chosen aspects—safety measures, accessibility, amenities, inclusivity, affordability, social environment, transportation, design and layout, and cultural sensitivity—were selected for their relevance to creating inclusive and functional public spaces. Safety emerged as a primary concern, emphasizing the importance of informal guardianship and visible law enforcement to foster a sense of security. Accessibility

was also highlighted, focusing on features like barrier-free pathways and stroller-friendly designs to ensure spaces accommodate diverse users. Similarly, the availability of clean public bathrooms and shaded seating as part of amenities was seen as crucial for enhancing comfort and usability.

Inclusivity and affordability were identified as essential for promoting social equity, ensuring spaces are welcoming and accessible to all, regardless of socioeconomic background. The social environment and transportation considerations emphasized the importance of vibrant, interactive spaces that are well-connected by safe and reliable transit options. Thoughtful design and layout, including open spaces, adequate lighting, and the integration of greenery, were recognized as vital for creating safe and inviting environments. Finally, cultural sensitivity and community engagement were considered fundamental, ensuring public spaces reflect local values while promoting gender inclusivity.

These measures provide a practical foundation for urban planners and decision-makers to design public spaces that are safe, inclusive, and accessible for women in Egypt, Jordan and similar countries. They serve as guidelines to address existing challenges and promote environments that support women inclusion.

Table 2 provides a comparison based on the discussion of Amman Downtown and Cairo Downtown, highlighting good practices and replicable strategies for making these spaces women-friendly:

Table 2: Comparison Amman Downtown and Cairo Downtown, based of women inclusion

Transportation	Design & Layout	Cultural Sensitivity	Community Engagement
Central accessible location	Open layout, seating options, well-lit.	Respects local culture	Informal guardianship by vendors, cleaners, and regular visitors
Highly accessible by strong transit network	Well-lit main streets, inadequate lighting in arrow streets	Respects local cultures	Vendors offer vibrant and bustling atmosphere.
Proximity to public transport	Open and welcoming design	Respects cultural norms	Community participation in maintaining safety
Develop gender-sensitive public transportation with accessible routes to public spaces.	Incorporate sufficient lighting, seating areas and welcoming design	Design spaces that align with cultural sensitivities	Foster partnerships with local vendors, residents, and organizations to enhance space safety and maintenance.

Aspect	Safety Measures	Accessibility	Amenities	Inclusivity	Affordability	Social Environment
Amman Downtown	Informal guardianship, steady police presence	Central location, walkable, stroller-friendly, barrier-free pavements	Nearby cafes/restaurants compensate for lack of public bathrooms	Welcomes diverse groups, allows women to interact freely in a safe environment	Low-cost food options, no obligation to spend money	Vibrant, diverse, safe, encourages interaction
Cairo Downtown	Security presence provides reassurance	Highly Central location, walkable and offers cycling and strong transit network	Few clean, accessible public bathrooms	Very diverse and dynamic, in addition to having mix-use nature	Various options for different users	Vibrant and highly social
Good Practices	Informal guardianship and police presence	Barrier-free pavements, central location	Availability of nearby alternatives	Positive social connotations, community-oriented environment	Affordable options for all socioeconomic groups	Vibrant social atmosphere, diverse groups
Replicable Strategies	Establish informal and formal safety measures, and promote security	Design pedestrian-friendly spaces with smooth pavements and low curbs.	Provide adequate public amenities such as bathrooms and shaded seating areas.	Foster a community-centered approach that encourages inclusivity and social cohesion.	Ensure spaces are affordable or free to access to encourage diverse participation.	Create lively, socially engaging spaces with cultural or recreational activities.

5. Conclusion

This study emphasizes the urgent need to make urban public spaces safer, more accessible, and inclusive for women. By focusing on two key examples: Habibah Square in Amman and Cairo Downtown, the research explores the factors that shape women's experiences in these environments. These factor

s range from safety measures and accessibility to amenities, inclusivity, affordability, social dynamics, transportation, thoughtful design, cultural sensitivity, and community engagement.

The findings highlight shared cultural and environmental patterns, where public spaces often reflect broader societal norms. Habibah Square stands out for its positive practices, such as informal guardianship, user-friendly pavements, and a lively social atmosphere that promotes inclusivity. On the other hand, Cairo Downtown allows for safety measures in main streets and vibrant and mixed-use urban area.

The study promotes the increase of security in streets, improving pedestrian-friendly infrastructure, maintaining public amenities, encouraging community-driven social interactions, and ensuring cultural sensitivity in urban design. Other crucial strategies involve ensuring accessible, gender-sensitive public transportation, incorporating well-lit and comfortable designs, and fostering active community involvement.

6. Recommendation

The study highlights the aspects for women inclusive public spaces in Egypt, Amman and similar countries. The following recommendations, aim to promote existing successful practices, and their wider replications. The recommendations are summarized in figure 3.

- **Increasing safety measures** including visibility and security to ensure public spaces are well-lit and equipped with visible security features such as CCTV cameras and regular police patrols. Community-based safety initiatives, like neighborhood watch programs, can complement formal measures. Additionally, natural surveillance should be promoted such as open layouts, clear sightlines, and strategically placed seating, to ensure a sense of safety by enabling passive monitoring by other users.
- **Increasing accessibility** in terms of designing infrastructures that are barrier free. Sidewalks and pathways must be smooth, even, and accessible to strollers and wheelchairs. Low curbs and clearly marked crossings are essential for ease of movement. Public spaces should be situated in accessible areas with reliable public transportation options that are safe and affordable for women.
- **Support public amenities including provision of** clean and secure restrooms to meet the needs of women and families, in addition to provision of comfortable rest areas such as shaded seating that are integrated into public spaces to encourage extended use, particularly during hot weather.
- **Promote inclusivity** by creating welcoming environments, encouraging interaction among diverse groups and ensuring that women feel safe and included. Community participation should be actively promoted, especially women, in the design and planning process to ensure spaces meet their specific needs and expectations.
- **Ensure affordability** through free or low-cost access, to ensure public spaces do not require financial expenditure to access or enjoy. Additionally, affordable options for food and recreational activities should also be included to cater to diverse socioeconomic groups.
- **Promote culturally sensitive design** that aligns with local cultural values and traditions, empowering women by normalizing their presence in public spaces through design and planning.
- **Promote transportation connectivity** through gender-sensitive transit that provides reliable, safe, and affordable public transportation, connecting women to key public spaces. Additionally, gender-sensitive stops should include well-lit stops and seating arrangements to enhance accessibility.
- **Promote social and cultural activities:** creating a vibrant and engaging atmosphere by hosting and organizing cultural, recreational, and educational events that attract diverse users, including women and

families, in addition to ensuring public spaces accommodate a variety of uses, through flexible space design, making them adaptable to the needs of different groups and activities.

- **Continuous monitoring and evaluation of impact** to assess public spaces periodically, incorporating feedback from women to identify gaps and areas for improvement. Additionally, data collection and analysis can guide decision-making, ensuring interventions are effective and aligned with women's needs.
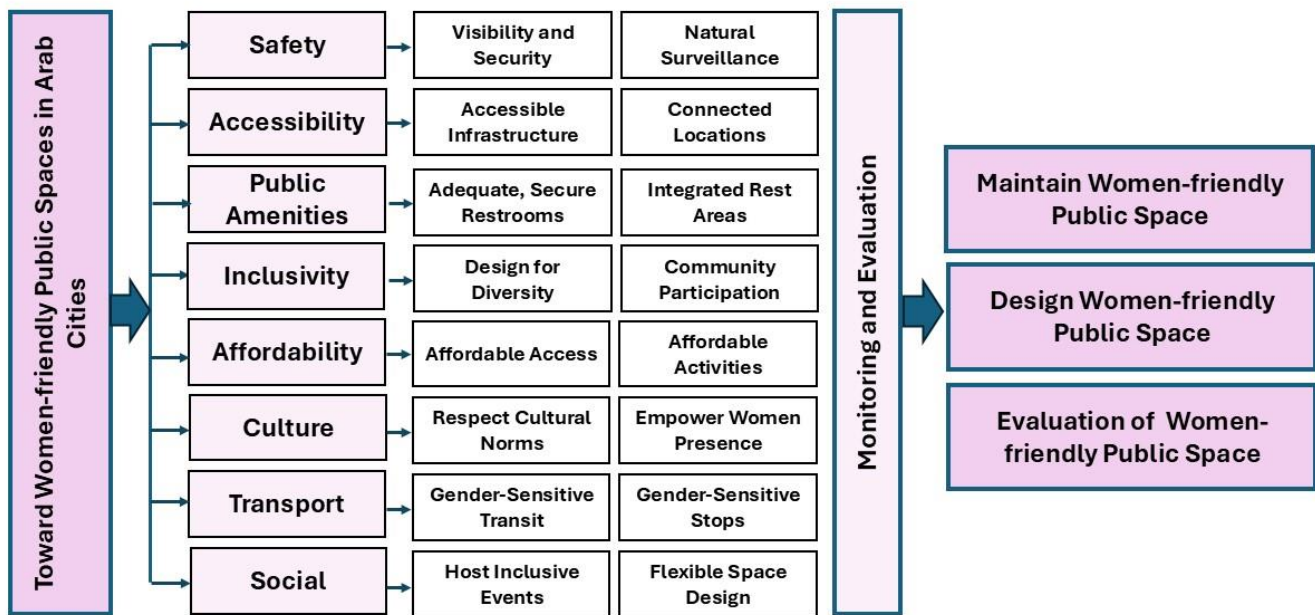

Fig. 3 Summary of key measures and recommendations from the study toward creating women-friendly public spaces in Egypt, Jordan and similar countries.

7. References

[1] UN-Habitat, "Building Gender-inclusive cities: Towards More Gender-inclusive Programmes, Public Spaces & Cities in the Arab Region" 2021. Report. https://unhabitat.org/sites/default/files/2022/05/gender-mapping_report_v7.pdf

[2] UN-Habitat, "Her City: A guide for cities to sustainable and inclusive urban planning and design together with girls" 2023. https://unhabitat.org/sites/default/files/2021/03/02032021_her_city_publication_low.pdf

[3] Terraza, H., Orlando, M. B., Lakovits, C., Lopes Janik, V., & Kalashyan, A. "Handbook for Gender-Inclusive Urban Planning and Design". 2020.

[4] P. Stoker, A. Garfinkel-Castro, M. Khayesi, W. Odero, M. N. Mwangi, M. Peden, and R. Ewing, "Pedestrian safety and the built environment: A review of the risk factors," *Journal of Planning Literature*, vol. 30, pp. 377–392, 2015. [Online]. Available: https://doi.org/10.1177/0885412215595438.

[5] A. Kelly, "Safe cities for women: From reality to rights," ActionAid, 2016.

[4] Greed, C. H., and Bettina, van H.. "Gender and the Planned City". 2004.

[5] UN Women. "Gender Mainstreaming: A Global Strategy For Achieving Gender Equality & The Empowerment Of Women And Girls". 2020.

[6] A. Fahmy and A. Badr, "Sexual violence in Egypt: A study on the means of support, protection, and reporting mechanisms," Tadwein Center for Gender Studies, 2021.

[7] A. Madanipour, *Whose public space?: International case studies in urban design and development*, New York, NY: Routledge, 2010.

[8] M. Carmona, "Contemporary public space: Critique and classification, part one: Critique," *Urban Design International*, vol. 15, p. 123, 2010.

[9] F. Elmenghawi, "Women and public space: A Ras Al Khaimah case study," Sheikh Saud bin Saqr Al Qasimi Foundation for Policy Research, Policy Paper 58, 2022. [Online]. Available: https://5081768.fs1.hubspotusercontent-na1.net/hubfs/5081768/PP58_ElmenghawiProff.pdf.

[10] M. Al-Bishawi, S. Ghadban, and K. Jorgensen, "Women's behaviour in public spaces and the influence of privacy as a cultural value: The case of Nablus, Palestine," *Urban Studies*, vol. 54, no. 7, pp. 1–19, 2015.

[11] V. Liani and Herlily, "Gendered space and sense of security," *IOP Conference Series: Earth and Environmental Science*, vol. 673, p. 012048, 2021. [Online]. Available: https://doi.org/10.1088/1755-1315/673/1/012048.

[12] L. van Rijswijk and A. Haans, "Illuminating for safety: Investigating the role of lighting appraisals on the perception of safety in the urban environment," *Environment and Behavior*, vol. 50, pp. 889–912, 2018. [Online]. Available: https://doi.org/10.1177/0013916517718888.

[13] UCL, "Scoping study: London's participation in UN Women's Safer Cities and Safe Public Spaces Programme," Department of Science, Technology, Engineering and Public Policy, Urban Lab, 2020.

[14] P. K. Baburajan, "Gendered spaces in the Arab world," *Journal of Asian Research*, vol. 4, no. 3, p. 19, 2020. [Online]. Available: https://doi.org/10.22158/jar.v4n3p19.

[15] C. Dameria and A. H. Fuad, "Enhancing female pedestrians' safety perceptions through the permeability of building frontages (Case study: Blok M area)," *IOP Conference Series: Earth and Environmental Science*, vol. 673, p. 012040, 2021. [Online]. Available: https://doi.org/10.1088/1755-1315/673/1/012040.

[16] K. Mouratidis, "The impact of urban tree cover on perceived safety," *Urban Forestry & Urban Greening*, vol. 44, p. 126434, 2019. [Online]. Available: https://doi.org/10.1016/j.ufug.2019.126434.

[17] C. Boomsma and L. Steg, "Feeling safe in the dark: Examining the effect of entrapment, lighting levels, and gender on feelings of safety and lighting policy acceptability," *Environment and Behavior*, vol. 46, pp. 193–212, 2014. [Online]. Available: https://doi.org/10.1177/0013916512453838.

[18] H. Allen, G. Cárdenas, L. Pereyra, and L. Sagaris, "Ella se mueve segura (ESMS) – Un estudio sobre la seguridad personal de las mujeres y el transporte público en tres ciudades de América Latina [A study on women's personal safety in public transport in three Latin American cities]," CAF and FIA Foundation, 2018.

[19] A. C. S. Souza, L. Bittencourt, and P. W. G. Taco, "Women's perspective in pedestrian mobility planning: The case of Brasília," *Transportation Research Procedia*, vol. 33, pp. 131–138, 2018. [Online]. Available: https://doi.org/10.1016/j.trpro.2018.10.085.

[20] OECD/CAWTAR, "Women in Public Life: Gender, Law and Policy in the Middle East and North Africa", 2014, OECD Publishing. http://dx.doi.org/10.1787/9789264224636-en

[21] GIZ, "Public space & gender in Amman," Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, 2020. [Online]. Available: https://www.giz.de/de/downloads/giz2021-0031en-public-space-gender-amman-jordan.pdf.

[22] G. Yassein, "Rethinking urban landscapes: Women's spaces and the dynamics of third places," *Engineering Research Journal*, vol. 0, no. 0, pp. 0–0, 2024. [Online]. Available: https://doi.org/10.21608/erjm.2024.258101.1311.

[23] M. Roshdy, "Investigating gender-sensitive public spaces in Cairo using women safety audit," *YMER*, vol. 23, no. 1, pp. 235–266, 2024.