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Abstract: This study seeks to comprehend the complex and diverse dynamics of women's encounters with urban green areas in the specific setting of Jordan. The utilization of the focus group methodology facilitated the organization of unstructured talks involving a cohort of twenty-seven female participants, which yielded intricate and perceptive perspectives on their opinions. This study revealed a widespread pattern of stigmatization and unfavorable assessment of women who utilize public areas, which is strongly ingrained in cultural norms and gender expectations. Women were also concerned about the potential harm to their reputation and the censure of society, which ultimately deterred women from participating in public spheres. The research thus centers on the close proximity and insufficiency of urban green areas in Jordan, which is worsened by high urban density. Insufficient lighting and security measures are responsible for further limiting women's access to areas like these, which also raises concerns about safety. Recent evidence has revealed deficiencies in infrastructure designed to accommodate the needs of women, particularly in public restroom facilities. This study emphasizes the immediate necessity for a fundamental change in urban policy and planning, towards more inclusive approaches. Within this strategic framework for urban policy, there is a strong emphasis on incorporating aesthetics, comfort, and safety elements to enhance the whole urban experience for women. Consequently, addressing this issue necessitates using gender-responsive strategies in urban design and planning. This includes enhancing the quality, cleanliness, and privacy aspects of facilities to cater to the specific needs of women and improve their overall well-being. This study contends that any ongoing discussion on sustainable urban development in Jordan must take into account the interaction between urbanization, accessibility to public spaces, and the well-being of women. Therefore, it is necessary to implement a worldwide effort to advocate for urban policies that include both genders. This program aims to propose innovative approaches to governance, security measures, and municipal infrastructures that are sensitive to gender-related issues.

Keywords: women; urban green spaces; community planning; urban Jordan

Urban Green Spaces

Urbanization is, therefore, considered a major focus in development, so much so that many researchers have focused their attention on the phenomenon, such as Rahman et al. in 2023 and Davis in 2016. Attention was also given to this by Beall et al. in 2009 and Smart & Smart in 2003. It is underscored most recently by the United Nations Sustainable Development Goal 11 and encapsulated within the New Urban Agenda of 2016, as mentioned by Nguyen & Nguyen in 2023 and Afinowi in 2022; Mwonzora 2022; Anarfi, 2020. The New Urban Agenda is dedicated to promoting safe, inclusive, and sustainable urban communities and human settlements (Schindler et al., 2018; Caprotti et al., 2017; Lipietz, 2016). Bound together by complex dimensions, the fundamentals of urban sustainability and inclusivity are one and the same. They consist of urban planning, equitative space allocation, ecological services, effective urban management, quality of green spaces, and easy access to socio-economic facilities. Urban Green Spaces (UGS) clearly play an outstanding role in the maintenance and improvement of the general well-being of the urban dwellers. The fact that more people now reside in urban areas than elsewhere is an indication that land-use conditions apparently do affect the way of life for most people (Duranton & Puga, 2014).

The challenge of inadequate public open space for recreation is further evidenced in densely populated metropolitan areas, given increased urban density and rising populations. UGS is seen as a key feature in most land-use types and is seen as a resource of great value to both urban areas and their local communities. This has been concurred to by multiple researchers (Farkas et al., 2023; Kolimenakis et al., 2021; Hunter et al., 2019; Mukherjee & Takara, 2018; Dickinson & Hobbs, 2017; World Health Organization, 2017). User-generated spaces (UGS) are the accumulation point of social interactions, activities, and expressions. Some of the studies that affirm this premise were conducted by Niu et al. 2022, Wan et al. 2021, Enssle & Kabisch 2020, and Zhang et al. 2017. Diverse and varying benefits of UGS to the social, physical, and psychological well-being of persons have been the focus of several research studies, for instance, Zhang et al. 2017. Basically, important places in the urban areas that call for social and physical interaction complexities include places like cityscapes, squares, streets, parks, marketplaces, buildings, arenas, and any other cultural venues. It is classified into 11 typologies according to its function by Carr et al. The other one by Gehl and Gemozoe distinguishes 39 categories, which gives maximum explanations in respect to the multitude of characteristics of a place, like city squares and promenades. According to Malone (2002), UGS encourages diversity within spaces that are restrained but with clear boundaries, which include place of worship and institutions of learning. Ikudayisi and Taiwo (2022) define public spaces as open spaces where, in one way or another, different activities are carried out under private or public ownership and management. Critical in this discourse, the spaces are very important forums in terms of social interfacing, conducting business, and communication. Jian et al. (2020) argued that the Urban Green Spaces should be under land use for parks and urban plazas, where free access should be maintained. The Urban Green Space will enhance the quality of the urban lives by creating a favorable atmosphere, establishing a linkage with nature, and also developing a need for recreation based on activities in and with nature (Haq, 2015).

Green spaces in cities promote physical activities and improve the emotional well-being of the public of the city, making them independent and with chances for leisure, political participation, and social interaction. The benefits of urban green spaces include illnesses reduction, promotion of physical well-being, social unity, and biodiversity conservation. The social benefits that go along with these activities include fun opportunities, the satisfaction of aesthetic desires, improvement in the sense of well-being, the formation of social relationships, and educational opportunities. (Jabbar et al., 2021; Reyes-Riveros et al., 2021; Vujcic et al., 2019; Kothencz et al., 2017). Historically, Urban Gathering Spaces (UGS) have functioned as points of cross-ethnic contact, sites for ethnic integration, and grounds for commerce, politics, sports, and religion. City parks and open spaces are seen as cultural and political spaces with critical implications on urban planning, social interaction, and the development of communities. Moreover, internationally, there is a realisation by governments of the important role public space plays in the development of infrastructure towards quality lives and well-being. Public spaces are areas of freedom and resistance, having cultural, artistic, and environmental value, favoring broad social interactions. Lynch (1984) identifies that public spaces work as a particular category of land use, which at urban locations, offer scopes for conservation of natural resources, recreation, and contact with the environment. At the end of the day, UGS play a very crucial function in giving boost to physical, social, and psychological well-being. And, by the capability to maintain the social contact, they foster the feeling of common ground in the urban surroundings and are, therefore, sustainable in the large scale. What is central to the conversation, though, is the amount of weight public space is given in terms of overall importance in the realms of urban planning. Mehta, for example, places an extreme importance in matters of ownership, access, control, and usage, in relation to defining public space. According to Talen, the very availability of different public areas may be used as a clear measure of how spread out they are in terms of their physical location. The preference for scattered spatial arrangements over concentrated alternatives is emphasized, suggesting that access and dispersion are important factors in urban development planning.

The defining characteristics of successful underground gas storage (UGS), as explained by Erkip (1997) and Whyte (2000), may be summarized into four essential components. The primary

importance of accessibility confirms the facility's simplicity of being reached by individuals. Moreover, the engagement in a great diversity of activities within a particular space as well adds up to the success spatially. Further, the spatial qualities of comfort and a good image tend to become of high importance as a means of improving the effectiveness of a social environment. Ultimately the social character of spatial design that enhances greater social contact between persons become most a decisive variable in determining its overall effectiveness. In this research article, the existing complexities emanating from the relationship between the dynamics of urbanization, accessibility to public spaces, and the general well-being of women are discussed, bringing life into the existing debates on sustainable urban development.

Spatial Justice

Spatial justice, stemming from Lefebvre's urban theoretical framework, requires deep understanding. It denotes 'the right to the city,' which includes actions of production, appropriation, and access of public space. Spatial justice considers the urban environment to be an effort that is collaborative and inclusive in nature, instigated through interactive and dynamic processes originating from all of its citizens. The theoretical basis of 'The right to the city' is based on the principle that a variety of social groups enjoy the privilege of living in the city, within which every group has various wants, interests, and demands over the city's resources. Spatial justice thus comes as a very complex process of continued struggle over the physical form of the city and the rightful distribution of powers among people who have different stakes within the city. Lefebvre's articulation of "the right to the city" makes a really important discursive shift in studies concerning urban justice.

It, therefore, underscores the emphasis on inhabitants' rights, as noted by Jian et al. (2021) and Dürr et al. (2019). This is an inclusive right that comprises such rights as the right to a fair participation in making urban spaces, accessing what the city has to offer without spatial segregation, not allowing the event of spatial segregation, the right to access core public services, among others, according to Jian et al. (2021). Spatial justice is a new, emerging conceptual framework challenging the traditional notion of physical space as a fixed background influencing social justice, instead emphasizing the need for spatiality alongside democracy and human rights. Spatial justice will be systematically explored within a three-part framework in this scientific exposition. It examines the physical manifestations of spatial justice, its impact on the urban socio-economic environment, and goes further to explain what is meant by the right to the city, zooming in more on spatial rights. Spatial justice has its theoretical basis in Lefebvre's dialectics of space. This means critically examining the tri-fold categorization of 'thought,' 'perceived,' and 'lived space.'. It is important to note that it is the fairness in the availability of public places for various social groups bred into the discourse of the strong bond with well-being of the individual. While, ideally, the urban landscape of the city should exude equality, it often shows stark evidence of widespread disparities and behaviors that exclude some groups, showing a visible lack of inclusiveness.

Consequently, this limits certain groups in the population from having full, unconditional access. An essential point raised in academic circles is that there should be more to studying physical patterns of distribution. They encourage a highly specialized analysis to be conducted regarding the intricate interplay between social structures and cultural contexts. An all-inclusive knowledge about issues related to inequality is believed to be a precondition for any move up the ladder of developmental research. The approach under query requires one to study the intricate tapestry of social structures, institutional frameworks, and cultural settings. Although the concept of spatial justice in sustainable urban design is an area of growing interest among academics, little research has been done to investigate its social component. In this line, Sharifi & Khavarian-Garmsir, 2020; Zuniga-Teran & Gerlak, 2019 have elaborated on the academic pursuit of the concept of spatial justice with respect to sustainable urban planning and its social sustainability across various scholarly viewpoints. Urban green spaces are viewed as shared spaces that depict locations people, regardless of their status, have a right of access to (Aronson et al., 2017).

According to Patterson, 2018, and Konow & Schwettmann, 2016, justice is a concept that is contested and context-dependent, varying differently at various social, geographical, and historical levels. Well-established theory on socioeconomic justice explains how human rights are expressed in everyday life for persons of different socioeconomic backgrounds. This scholarship discussion simplifies a need to go beyond redistribution if injustice is to be resolved, and it calls for recognition and addressing concerns relevant to the rights of people, dominance, and oppression.

Urban Green Spaces in Urban Jordan

According to Rogers, urban green spaces (UGS) play a vital role in shaping cities by providing recreational possibilities, boosting the aesthetic appeal of the area, and influencing people's views. Urban Green Space (UGS), which includes urban open parks, has been identified as a prominent component of Jordan's urban green infrastructure. These studies by Alnusairat & Hijazi, 2023; Jamhawi et al., 2020; Farhan & Al-Shawamreh, 2019 demonstrate that they are very influential and significant. There is a growing concern in the Hashemite Kingdom of Jordan over urban planning, particularly in relation to the availability of public areas. However, in certain urban areas in Jordan, the "right to the city" is frequently granted to the affluent and important social strata. This raises problems over land ownership, labor, and political and cultural matters that might potentially exacerbate pre-existing socio-economic divisions. While Jordan has a high population density, Amman is predicted to have a much lower amount of green space per person compared to global norms (Potter et al., 2009; Al Faqih, 2005).

The tree canopy in the metropolitan area is just 8.5%, well below the required minimum of 20% necessary for an ideal urban setting, as reported by The Jordan Times in 2019. The government manages these spatial enclaves, which greatly contribute to enhancing the urban living environment by providing a pleasant ambiance that aligns with a healthy urban lifestyle and offers access to nature. Furthermore, the implementation of green areas in Jordan will encourage physical exercise and uphold positive emotional health. Furthermore, it aligns with the objective of enhancing health throughout the elderly stage, particularly in terms of mental well-being. Amman now has a total of 54 public parks and urban green areas inside the city borders. Out of these, the Amman Municipality is the owner of 46. Regrettably, this collection comprises just a meager 14.5% of UGS categories, including playgrounds, parks, paths, and forested spaces. These places provide benefits, but the ability to effectively oversee administration has been hindered by practical challenges at many levels of local governance.

The issue of accessibility in Jordanian cities is influenced by several social and economic factors, as well as people's usage patterns.

These difficulties are nearly analogous to the challenges faced by rising countries. This work involves the intricate task of enhancing the implementation and guaranteeing widespread availability of urban green spaces in Jordan. It necessitates focused endeavors to seamlessly integrate urban planning goals with developmental requirements.

Methodology

Research Design

This study delves into the intricate dynamics surrounding women's use of urban green spaces in Jordan. Considering the obstacles presented by urbanization, societal norms, and infrastructural limitations, this study employs a qualitative approach to gain a comprehensive understanding of the challenges that women encounter when trying to access and fully experience public spaces. According to Maxwell (2008), qualitative research is highly valuable for understanding the unique environments in which participants are involved and how these environments influence their behaviors. The research design was structured into three main phases:

Literature review: insights from existing literature were utilized to shape the focus group proforma, ensuring that the discussion topics covered a wide range of relevant experiences for the participants. A meticulous proforma was created to delve into the identified themes extensively. The

questions were carefully constructed to obtain detailed responses regarding the unique obstacles women encounter, their perspectives on public spaces, and their recommendations for enhancing accessibility and safety. This approach ensured that the focus group discussions were based on a strong theoretical foundation, enabling a comprehensive exploration of the issues being studied.

Assessment: During this stage, information was gathered by conducting six focus group discussions (FGDs) with twenty-seven women from various sociodemographic backgrounds in urban Jordan. The FGDs were conducted to delve into participants' personal experiences, perceptions, and the unique obstacles they encounter when trying to access urban green spaces. The discussions were organized in a way that allowed for a thorough examination of topics including safety, accessibility, and the effects of societal judgments. This approach was selected due to its capacity to capture the subtle and frequently overlooked elements of women's experiences in public spaces.

Analysis: The last step consisted of a thorough examination of the FGD transcripts. Because the participants were not comfortable with recording, the analysis relied on detailed notes that were taken during the discussions. An analysis was conducted to identify recurring themes and patterns in the data, which were subsequently organized into broader categories. An in-depth analysis was conducted on these categories to draw insightful conclusions regarding the major obstacles that hinder women's access to urban green spaces in Jordan. The findings were examined in relation to existing literature to confirm the results and to emphasize new perspectives that are relevant to the Jordanian context.

Adopting a qualitative approach was crucial in order to gain a profound understanding of the various factors that impact women's utilization of public spaces in Jordan. Through an examination of women's lived experiences, the study revealed the various societal, infrastructural, and cultural obstacles that hinder their ability to access these crucial urban areas. The findings of this study add to the ongoing discussion on urban planning and gender inclusivity, providing useful suggestions for improving the accessibility and inclusiveness of public spaces for women in Jordan.

Data Collection

A total of twenty-seven women took part in six focus group conversations. A focus group is a research method where a small number of participants, often ranging from four to twelve, engage in a detailed and unrestricted conversation to investigate particular topics within a predetermined and restricted structure. This has been shown in the literature by several writers, such as Muijeen et al. in 2020, Rosenthal in 2016, Ryan et al. in 2014, Kindon in 2007, and Morgan in 1996. The utilization of focus group technique is advantageous since it harnesses the collective power of a group, hence enabling participants to articulate their thoughts and ideas in a more comprehensive and intricate manner compared to individual interviews. Consequently, this analytical approach plays a crucial role in examining the cognitive components of individuals' knowledge and experiences. This approach not only examines the substance of their views but also reveals the cognitive processes and motivational structures that support them (Hines, 2000; Morgan, 1996). Focus Group Discussions have been demonstrated to be effective in uncovering subtle details that may be overlooked by conventional techniques of data collecting (Kindon, 2007). For this study, six Focus Group Discussions (FGDs) were carried out in a methodical manner. Each focus group discussion (FGD) was conducted with a cohort of participants, consisting of a minimum of four individuals and a maximum of seven. According to the studies conducted by Muijeen et al. (2020) and Rosenthal (2016), this numerical pattern was deemed sufficient in covering all the relevant topics pertaining to the issue being investigated in this case. Women were selected following a methodical approach to provide the highest level of anonymity for all participants, taking into account their specific sociodemographic characteristics.

Prior to the scheduled discussions, written material, including invites, was sent in advance, about 1-2 weeks beforehand. The subjects provided informed permission after receiving a comprehensive research explanation during a telephone interview. The study team made it very clear

that any information shared during the Focus Group Discussions would be handled with utmost discretion.

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Age	
18-24 years	9
25-64 years	13
65 years and older	5
Education	
School	3
University	15
Still studying	9
Marital status	
Single	9
Married	16
Divorced	1
widowed	1
Occupation	
Student/unemployed	9
Civil servant	7
Own business	2
Private sector worker	1
Retired	8

Prior to the commencement of the FGDs, participants conscientiously completed questionnaires including background data, which encompassed demographic information such as age, educational attainment, and marital status. The researcher consistently maintained an impartial demeanor when engaging with participants throughout the whole inquiry. The discussion guide was meticulously crafted, using pre-determined questions that facilitated the methodical attainment of the study's goals. From this point onward, the questions have to be included into the framework of the focus group talks, as follows:

- What is your assessment of the existing accessibility of urban green spaces for women in Jordan? Specifically, what are the particular challenges or limitations they encounter when attempting to access these areas?
- How do you believe the design and structure of urban areas in Jordan impact the comfort and willingness of women to utilize urban green spaces? Do certain qualities or aspects hold greater significance than others in a comprehensive and all-encompassing environment?
- Can you provide any personal anecdotes or direct observations on the frequency of women in Jordan utilizing urban green spaces? To what extent are their levels of involvement impacted by cultural norms and expectations?
- What specific activities or interventions do you believe might enable women in Jordan to access and utilize green urban spaces in a safer and more comfortable manner? Has there been any action in infrastructure, policy, or cultural attitudes that may potentially improve women's experiences in these environments?

The deliberate sessions had a duration of 1.5 to 2 hours. The ladies had a high level of willingness to engage in open and honest conversation, which was skillfully guided by the author. The author made sure that all issues outlined in the discussion guide were thoroughly addressed. Thorough and meticulous documentation was created for any important information that emerged from the conversations. Following each focus group session, the research facilitator promptly provided a concise recap of all the information discussed, ensuring its correctness by consulting with the participants.

Analysis

A meticulous qualitative approach was used to analyze the data collected from the focus group discussions (FGDs) with twenty-seven female participants in urban Jordan. Because of the participants' unease with recording, the analysis heavily relied on the transcripts of these discussions. The data analysis method used in this study was influenced by the established procedure developed by Miles and Huberman (1994). This procedure includes steps such as data reduction, data display, and conclusion drawing/verification.

During the data reduction stage, the focus was on organizing and simplifying the data, with an emphasis on identifying recurring themes and patterns that emerged from the FGDs. The data were organized into twelve distinct categories, which were later combined into broader themes to avoid repetition and improve the clarity of the analysis. Understanding the challenges women face in accessing and using urban green spaces in Jordan was a crucial step in our research.

The data display process involved organizing the condensed data into visual and thematic formats that allowed for a more profound understanding of the participants' experiences and perspectives. By organizing the data into categories such as safety concerns, infrastructural deficiencies, and societal stigmatization, a clear comparison of issues across different sociodemographic groups was made possible. This analysis was crucial in showcasing the similarities and distinctions in the experiences of women from different backgrounds in urban areas of Jordan.

In the final stage of the study, the researchers summarized the main findings and compared them with existing literature on urban green spaces and gender issues in urban planning. The findings of this study reaffirmed the ongoing difficulties that women in Jordan encounter when trying to access and utilize UGS. In addition, there have been recent findings that shed light on how cultural norms and gender expectations can impact women's participation in these environments.

The analysis revealed four key themes that emerged from the study: the availability and limited supply of urban green spaces, concerns about safety, inadequacies in infrastructure that cater to the needs of women, and the societal stigma associated with these issues. The various themes explored in this study shed light on important aspects of the urban experience for women in Jordan. These findings can serve as a valuable foundation for the development of urban policies and planning strategies that take gender sensitivity into account. The study's findings highlight the pressing requirement for urban planning practices that prioritize inclusivity and take into account the unique needs and preferences of women, especially in the creation and maintenance of public spaces.

The findings highlight the importance of taking a holistic and inclusive approach to urban planning in Jordan. This approach should specifically address the distinct challenges faced by women and guarantee equal access to urban green spaces for all residents. The study suggests adopting gender-responsive strategies in urban design to improve the safety, cleanliness, and privacy of public facilities. This would create a more inclusive and supportive urban environment for women in Jordan.

Research Findings

The FGDS enabled the discovery of the low availability and high significance of UGS in Jordan's urban setting, which is embedded in a complex legislative framework. Hence, this study identifies the prime needs of urban green spaces (UGS) in the lives of women and underlines the urgent need for better and more excellent spatial settings. Several women in Jordan feel marginalized, which puts them in innovative social environments. At the international level, more attention is increasingly paid to how UGS and good urban design could contribute to attaining the UN-Habitat-set SDG framework. Through questioning, it came out more insistently that UGS is relevant to human welfare, in particular, women. Equal and fair access to public spaces empowers women of Jordan. Indeed, it has been ascertained from the probe that the overall value of UGS—urban green space—in daily life amongst women cannot be overstated since they form significant spaces for social interaction and community bonding. Additional UGS in Jordan are urgently needed, as the metropolitan structure is characterized by complexities and a dense population. Current UGS often stay out of focus and, with their limited number, women have to find a haven in privately held locations. The limited characteristics of public areas in the Jordanian urban landscape restrict women from using these places, and it is affected by several causes. The next paragraph elaborates on these aspects with the help of the scholarly debate.

Proximity and Scarcity of Urban Green Spaces

The outcome of the FGDs highlights the limited availability yet significant worth of Urban Green Spaces in the urban setting of Jordan. Furthermore, it is subject to intricate rules, encompassing both formal and informal measures. The empirical evidence highlights the critical significance of urban green space for women, emphasizing the pressing necessity for the prompt establishment of enhanced, top-notch spatial configurations. The findings emphasize the need of development frameworks that employ targeted interventions tailored to the individual environment and area. This approach is shaped by a keen understanding and ability to respond to the specific requirements and situations of the female population. Jordan's current planning frameworks lack sufficient focus on the precise delineation and provision of high-quality public spaces in urban areas. Moreover, it is evident that the existing planning framework does not prioritize enhancing diversity or ensuring equitable access to urban services and spaces for disadvantaged groups, particularly women. In the lack of defined rules or legal requirements within the planning system, the execution of these measures relies on discretionary decisions made by local political authorities or occasional intents of non-governmental actors.

Safety Concerns in Urban Green Spaces

. The dynamic urban environment of Jordan has meant that continuous urbanization throws up new, complex issues for planning agencies concerned with securing fair and safe urban green areas in their towns. These are places where women would access critical services, participate in cultural activities, and engage in recreation; thus, they help improve their health and well-being. The findings that come out from targeted group discussions with Jordanian women underline the infrequency of sexual harassment and other forms of violence in low public areas. On the other hand, they also point to a generalized feeling of fear, which presents an ongoing threat to their ability to participate fully in urban environments. This fear, based in the broader concept of urban living, shapes women's perception and interaction with the city. Women explain that this generalized fear impacts severely how females can exercise their rights as citizens within metropolitan areas. The frustrations expressed by women living in economically disadvantaged areas are particularly sharp.

In these areas, it is perceived that urban green spaces important to communal well-being are fraught with danger after dark. Poor lighting in certain areas forces women to go through streets not well lit, hereby undermining their sense of security and exacerbating challenges they already face in claiming the right to use urban spaces without fear. Analysis of the safety concerns for women within Jordan's urban green areas identifies several aspects that interplay and cause vulnerabilities in the urban environment. Among these, an observed challenge is the scarcity of adequate lighting surfaces, as inadequate light is not only a hindrance to proper sight but also projects an environment that is conducive to potential safety hazards.

Other than this, the insecurity women face in cities is accentuated by a total lack of proper security measures, hence placing a critical need for strengthening security infrastructure responsive to the unique urban dynamics in Jordan.

Deficiencies in Female-Friendly Infrastructure in Urban Green Spaces

This entailed conducting a focus group discussion to delve deeper into the urban amenities in Jordan, particularly the insufficiency of female-friendly restroom facilities in the country's urban green spaces. Participants from many backgrounds in urban Jordan raised concerns about the persistent difficulties related to the inadequate quantity and substandard upkeep of public bathrooms in these urban green spaces. Participants have consistently expressed a significant worry about the unsanitary conditions in urban public facilities, which discourages women from coming and expecting clean and hygienic settings. Moreover, the FGD revealed a significant deficiency in the availability of dedicated places intended to offer women a private setting in public restrooms located in urban green areas.

The participants emphasized the necessity of zoning distinct regions, specifically to address the unique privacy requirements of women that are now overlooked in the existing municipal planning framework. The absence of private locations in these venues created a noticeable discomfort for women and impeded their use of UGSs, hence impacting their overall experience in these spaces. The necessity to address concerns regarding cleanliness and the absence of private spaces necessitates the inclusion of gender-sensitive considerations in the development and management of facilities in metropolitan settings. It is a component of the wider discourse aimed at ensuring that Jordan's urban areas are accessible and fair for all.

Stigmatization and Social Judgments

The issue of stigmatization and societal judgment of women who utilize public places was a key topic of discussion in our focus group, specifically within the context of Jordan. Participants consistently highlighted the existence of a pervasive culture that harshly criticizes women who decide to participate in activities in public settings. These chats revealed a widespread belief among women that moving through public areas puts their reputations at risk and simultaneously reinforces the notion that they are seen as lacking respectability and moral goodness. In Jordanian society, the view of women's conduct is influenced by conventional gender roles and societal expectations, which can be interpreted in a broader sense. The stigma associated with women being in public spaces is a consequence of certain conventional cultural conventions that establish specific gender roles. Thus,

these rules become ingrained in the collective public perception and contribute to the reinforcement of existing gender stereotypes. An issue frequently raised by participants of the focus group was the influence of public scrutiny on the well-being and autonomy of women. One of the main obstacles that women encounter in engaging in the public arena, and consequently in maintaining gender inequality, is the fear of reputational harm.

The origin of such events may be traced back to historical-cultural narratives that emphasize moral expectations regarding women's conduct in public areas. During their discussions, the participants disclosed that the assessment of women in public areas was not just a subjective viewpoint, but rather a systemic obstacle. A discerning strategy that directly engages with the cultural politics and confronts the deeply ingrained prejudices is necessary for tackling the issue. The concept aimed to create an environment where women could engage in public spaces, alongside others, without facing any potential adverse repercussions within society.

Enhancing the Urban Experience for Women in Jordan

The global endeavor to promote urban policies that prioritize the improvement of qualitative elements in public spaces inside cities is crucial. This scholarly inquiry highlights the necessity of enhancing the level of analytical depth regarding matters of spatial justice and employing more suitable methods to examine women's individual encounters in the urban setting of Jordan. This article supports the use of creative methods in spatial planning and decision-making processes. It firmly promotes the idea of democracy in urban policy, planning, and research. This reorientation aims to address the political, social, and cultural issues that women encounter in the metropolitan regions of Jordan. This pathway aims to provide improved integration and long-term viability in urban development. One potential method for boosting the urban experience would involve shifting municipal policy towards the public domain. This would entail increasing the amenities and comfort of the city, as well as promoting inclusivity and safety. Additionally, efforts may be made to create a more favorable urban environment for women.

It is often praised as a collaborative effort that aligns with the wants and needs of the individuals participating, following established standards. This research advocates for the adoption of inclusive urbanism that is rooted on spatial justice. This study suggests using strategies that involve all parties involved in the decision-making process. It will lead to increased engagement in urban planning, governance, and design. The extent to which women in urban Jordan have more access to public areas is contingent upon the effectiveness of a governance model that encourages active involvement and facilitates significant reform. This is because individuals will actively engage in all stages of development, including planning, designing, resource allocation, maintenance, and eventually, experiencing and utilizing the end result.

The aforementioned guiding principles have the potential to be implemented by actors such as politicians, urban planners, and municipal authorities. Their application can aid in the establishment of sustainability, inclusivity, and resilience within the urban environment. The lack of sufficiently shaded urban areas is a problem for many women and reinforces their concerns about their safety in urban Jordan. In order to address this issue, it is necessary to adopt a multi-faceted and comprehensive strategy. This approach should include carefully planned strategies for urban planning, reinforcing security frameworks, and implementing particular interventions to improve the participation and safety of women in urban areas in Jordan. These findings need a fresh evaluation of existing infrastructural frameworks in the urban setting of Jordan by urban planners, policymakers, and designers. The primary focus should be on implementing gender-responsive strategies that cater to the distinct requirements and preferences of women. Enhancing the quality, hygiene, and confidentiality of toilets designed for women is crucial for fostering gender-inclusive urban growth in environmentally-friendly metropolitan settings.

Research Conclusions

This extensive study involved conducting six meticulously executed focus group discussions with twenty-seven female participants who represented a diverse range of sociodemographic

backgrounds in metropolitan Jordan. The research yielded significant and noteworthy findings regarding the intricate obstacles that women encounter when attempting to access and utilize public spaces. The qualitative technique used in this study was highly effective since it used the interactive character of group interactions to uncover the cognitive qualities and motivational structures that underlie women's experiences.

The results highlight concerning indications of marginalization that the majority of women in Jordan encounter, which drive them to establish alternative social environments where they may freely express their uniqueness. Public spaces are considered essential for the general welfare and enjoyment of a city, since they provide opportunities for residents to gather and form social connections within their communities. Nevertheless, the urban environment in Jordan lacks well maintained green areas, resulting in women seeking comfort in privately owned places due to the scarcity and limitations of public spaces.

One significant discovery pertains to the safety of green spaces in urban settings. While instances of actual violence are few, the prevailing sense of fear significantly limits the mobility of women in urban areas, particularly at night. The absence of sufficient illumination and safety amenities exacerbates these problems and necessitates a planned comprehensive approach in urban design to improve specialized security infrastructure that addresses the unique characteristics of Jordan's urban environment.

This paper also highlights the absence of women-friendly infrastructure, specifically in relation to public facilities. The lack of cleanliness and privacy in urban green spaces is a significant barrier for women, causing them to feel uncomfortable and reluctant to engage with these facilities. Gender-sensitive concerns are significantly integrated into urban design, particularly on the quality, cleanliness, and privacy aspects of facilities that cater to women's need.

An increasing issue has arisen due to the frequent stigmatization and bad view of women using public areas. The historical and cultural narratives reinforce this notion, exacerbating gender-based prejudices and actively prohibiting women from freely participating in public areas. An strategy that is sophisticated in understanding cultural sensitivity and questioning deeply ingrained beliefs is necessary. This will be beneficial in fostering an environment where women may engage without apprehension of any adverse repercussions in society. This study emphasizes the need for fundamental transformation in urban policies based on these findings and spatial justice concerns, in order to provide a more comprehensive examination.

A worldwide effort is needed to advocate for urban policies that prioritize gender sensitivity and provide an inclusive environment for creative approaches to spatial planning and decision-making. A governance model is necessary to facilitate fundamental changes in Jordan's urban region, particularly to promote inclusion and sustainability. This model should ensure that residents are actively involved in all stages of the planning process for public spaces. The report urges urban planners, legislators, and designers to initially reassess the existing infrastructure frameworks in Jordan's urban environment. The study highlights the need to adopt gender-responsive strategies that specifically cater to the distinct needs and preferences of women. Gender-inclusive urban development in Jordan can only be achieved by improvements in the quality, cleanliness, and privacy of amenities specifically tailored for women.

References

1. Maxwell, J. A. (2008). *Designing a qualitative study* (Vol. 2, pp. 214-253). The SAGE handbook of applied social research methods.
2. Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook. sage.
3. Afinowi, T. A. (2022). *The intersections between global urban agendas and practice at local levels in housing and human settlements, a case of Lagos* (Doctoral dissertation, Faculty of Engineering and the Built Environment, University of the Witwatersrand).
4. Al Faqih, S. S. A. (2005) *Urban cultural revival in Amman: a city in transition.* Amman: University of Jordan.
5. Al Shawabkeh, R. K., Alobaidat, E., Alhaddad, M. I., & Alzouby, A. M. (2022). The role of social infrastructure services in developing the city centre planning: A framework for delivering sustainable cities in Jordan. *Ain Shams Engineering Journal, 13*(6), 101800.

6.   Ali, H., Alnusairat, S., & Hijazi, H. (2023). Green urban evaluation index for the central districts of cities in developing countries: case of Jordan. *URBAN DESIGN International*, *28*(3), 234-251.

7.   Anarfi, K. (2020). Towards an African perspective of urban sustainability: evidence from Ghana (Doctoral dissertation, Bournemouth University).

8.   Ardill, N., & Lemes de Oliveira, F. (2018). Social innovation in urban spaces. *International Journal of Urban Sustainable Development*, *10*(3), 207-221.

9.   Aronson, M. F., Lepczyk, C. A., Evans, K. L., Goddard, M. A., Lerman, S. B., MacIvor, J. S., ... & Vargo, T. (2017). Biodiversity in the city: key challenges for urban green space management. *Frontiers in Ecology and the Environment*, *15*(4), 189-196.

10. Beall, J., Guha-Khasnobis, B., & Kanbur, R. (2009). Beyond the tipping point: a multidisciplinary perspective on urbanization and development.

11. Bibri, S. E. (2021). The core academic and scientific disciplines underlying data-driven smart sustainable urbanism: an interdisciplinary and transdisciplinary framework. *Computational Urban Science*, *1*, 1-32.

12. Boyko, C. T., & Cooper, R. (2011). Clarifying and re-conceptualising density. *Progress in Planning*, *76*(1), 1-61.

13. Brenner, N. (2000). The urban question: reflections on Henri Lefebvre, urban theory and the politics of scale. *International journal of urban and regional research*, *24*(2), 361-378.

14. Burton, E. (2000). The compact city: just or just compact? A preliminary analysis. *Urban studies*, *37*(11), 1969-2006.

15. Byrne, J., & Sipe, N. (2010). Green and open space planning for urban consolidation–A review of the literature and best practice. *Urban Research Program*, *11*, 60.

16. Calderón-Argelich, A., Benetti, S., Anguelovski, I., Connolly, J. J., Langemeyer, J., & Baró, F. (2021). Tracing and building up environmental justice considerations in the urban ecosystem service literature: A systematic review. *Landscape and urban planning*, *214*, 104130.

17. Caprotti, F., Cowley, R., Datta, A., Broto, V. C., Gao, E., Georgeson, L., ... & Joss, S. (2017). The New Urban Agenda: key opportunities and challenges for policy and practice. *Urban research & practice*, *10*(3), 367-378.

18. Carr, S., Francis, M., Rivlin, L., & Stone, A. (1992). Public space Cambridge University Press. New York.

19. Coşkun, B. (2017). 'City'and'human rights' in a pot: impacts, opportunities and challenges of the multi-actor structure of'the right to the city'.

20. Davis, D. E. (2016). Reflections on the relations between development and urbanization: past trajectories and future challenges. *International Journal of Urban Sciences*, *20*(1), 1-14.

21. Debruyne, P. and Parker, C. (2016) 'Reassembling the political: placing contentious politics in Jordan', in Gerges, F.A. (ed.) *Contentious politics in the Middle East: popular resistance and marginalized activism beyond the Arab uprisings.* New York: Palgrave Macmillan, pp.437–465.

22. Dickinson, D. C., & Hobbs, R. J. (2017). Cultural ecosystem services: Characteristics, challenges and lessons for urban green space research. *Ecosystem services*, *25*, 179-194.

23. Diener, E., Biswas-Diener, R., & Lyubchik, N. (2018). Social well-being: Research and policy recommendations. *Global Happiness*.

24. Duranton, G., & Puga, D. (2014). The growth of cities. *Handbook of economic growth*, *2*, 781-853.

25. Dürr, E., Ege, M., Moser, J., Neumann, C. K., & Winder, G. M. (2019). Urban ethics: Towards a research agenda on cities, ethics and normativity. *City, Culture and Society*.

26. Enssle, F., & Kabisch, N. (2020). Urban green spaces for the social interaction, health and well-being of older people—An integrated view of urban ecosystem services and socio-environmental justice. Environmental science & policy, 109, 36-44.

27. Erkip, F. B. (1997). The distribution of urban public services: the case of parks and recreational services in Ankara. *Cities*, *14*(6), 353-361.

28. Farhan, Y., & Al-Shawamreh, S. (2019). Impact of rapid urbanization and changing housing patterns on urban open public spaces of Amman, Jordan: a GIS and RS perspective. *Journal of Environmental Protection*, *10*(1), 57-79.

29. Farkas, J. Z., Hoyk, E., de Morais, M. B., & Csomós, G. (2023). A systematic review of urban green space research over the last 30 years: A bibliometric analysis. *Heliyon*.

30. Fincher, R., & Iveson, K. (2012). Justice and injustice in the city. *Geographical research*, *50*(3), 231-241.

31. Fors, H., Hagemann, F. A., Sang, Å. O., & Randrup, T. B. (2021). Striving for inclusion—A systematic review of long-term participation in strategic management of urban green spaces. *Frontiers in Sustainable Cities*, *3*, 572423.

32. Gehl, J., & Gemzøe, L. (2001). New city spaces.

33. Ghulyan, H. (2019). Lefebvre's production of space in the context of Turkey: a comprehensive literature survey. *Sage Open*, *9*(3), 2158244019870537.

34. Haq, S. M. A. (2015). Urban green spaces and an integrative approach to sustainable environment. *Urban Ecology: Strategies for Green Infrastructure and Land Use*, *147*.

35. Hines, T. (2000). An evaluation of two qualitative methods (focus group interviews and cognitive maps) for conducting research into entrepreneurial decision making. _Qualitative Market Research: An International Journal_, _3_(1), 7-16.

36. Horwitz, P., Kretsch, C., Jenkins, A., Rahim bin Abdul Hamid, A., Burls, A., Campbell, K., ... & Wright, P. (2015, June). Contribution of biodiversity and green spaces to mental and physical fitness, and cultural dimensions of health. World Health Organization and Secretariat of the Convention on Biological Diversity.

37. Hunter, R. F., Cleland, C., Cleary, A., Droomers, M., Wheeler, B. W., Sinnett, D., ... & Braubach, M. (2019). Environmental, health, wellbeing, social and equity effects of urban green space interventions: A meta-narrative evidence synthesis. _Environment international_, _130_, 104923.

38. Ikudayisi, A. E., & Taiwo, A. A. (2022). Accessibility and inclusive use of public spaces within the city-centre of Ibadan, Nigeria. _Journal of Place Management and Development_, _15_(3), 316-335.

39. Jabbar, M., Yusoff, M. M., & Shafie, A. (2021). Assessing the role of urban green spaces for human well-being: A systematic review. _GeoJournal_, 1-19.

40. Jamhawi, M. D., Al-Shawabkeh, R. K., & Alobaidat, E. I. (2020). Spatial modeling of transformation of public open spaces in Zarqa, Jordan. _International Journal of Sustainable Development and Planning_, _15_(5), 685-703.

41. Jennings, V., & Bamkole, O. (2019). The relationship between social cohesion and urban green space: An avenue for health promotion. _International journal of environmental research and public health_, _16_(3), 452.

42. Jian, I. Y., Chan, E. H., Xu, Y., & Owusu, E. K. (2021). Inclusive public open space for all: Spatial justice with health considerations. _Habitat International_, _118_, 102457.

43. Jian, I. Y., Luo, J., & Chan, E. H. (2020). Spatial justice in public open space planning: Accessibility and inclusivity. Habitat International, 97, 102122.

44. Jordan Times. (2019, April 1). GAM cites challenges to expanding parks as WHO standards reveal 'great shortage' of green areashttps://jordantimes.com/news/local/gam-cites-challenges-expanding-parks-who-standards-reveal-%E2%80%98great-shortage%E2%80%99-green-areas.

45. Kasim, J. A., Yusof, M. J. M., & Shafri, H. Z. M. (2019). The many benefits of urban green spaces. _CSID Journal of Infrastructure Development_, _2_(1), 103-116.

46. Kindon, S., Pain, R., & Kesby, M. (Eds.). (2007). Participatory action research approaches and methods: Connecting people, participation and place.

47. Kirkham, S. R., & Browne, A. J. (2006). Toward a critical theoretical interpretation of social justice discourses in nursing. _Advances in Nursing Science_, _29_(4), 324-339.

48. Kolimenakis, A., Solomou, A. D., Proutsos, N., Avramidou, E. V., Korakaki, E., Karetsos, G., ... & Tsagkari, K. (2021). The socioeconomic welfare of urban green areas and parks; A literature review of available evidence. _Sustainability_, _13_(14), 7863.

49. Konow, J., & Schwettmann, L. (2016). The economics of justice. _Handbook of social justice theory and research_, 83-106.

50. Koshoedo, S. A., Paul-Ebhohimhen, V. A., Jepson, R. G., & Watson, M. C. (2015). Understanding the complex interplay of barriers to physical activity amongst black and minority ethnic groups in the United Kingdom: a qualitative synthesis using meta-ethnography. _BMC public health_, _15_, 1-16.

51. Kothencz, G., Kolcsár, R., Cabrera-Barona, P., & Szilassi, P. (2017). Urban green space perception and its contribution to well-being. _International journal of environmental research and public health_, _14_(7), 766.

52. Lesutis, G. (2021). Planetary urbanization and the "right against the urbicidal city". _Urban Geography_, _42_(8), 1195-1213.

53. Li, H., & Wei, Y. D. (2023). COVID-19, cities and inequality. _Applied Geography_, _160_, 103059.

54. Lipietz, B. (2016). Urban Transformations: The New Urban Agenda-Challenges, opportunities and DPU contributions to a new framework for a sustainable future. _DPU News_, (60), 2-7.

55. Lo, A. Y., & Jim, C. Y. (2010). Differential community effects on perception and use of urban greenspaces. _Cities_, _27_(6), 430-442.

56. Lynch, K. (1984). _Good city form_. MIT press.

57. Malone, K. (2002). Exposing intolerance and exclusion and building communities of difference. In _Paper presented at the Youth Coalition Symposium" Youth and Public Space", Canberra, 2002_.

58. McConnachie, M. M., & Shackleton, C. M. (2010). Public green space inequality in small towns in South Africa. _Habitat international_, _34_(2), 244-248.

59. Mensah, C. A., Andres, L., Perera, U., & Roji, A. (2016). Enhancing quality of life through the lens of green spaces: A systematic review approach. _International Journal of Wellbeing_, _6_(1).

60. Mirzoev, T., Tull, K. I., Winn, N., Mir, G., King, N. V., Wright, J. M., & Gong, Y. Y. (2022). Systematic review of the role of social inclusion within sustainable urban developments. _International Journal of Sustainable Development & World Ecology_, _29_(1), 3-17.

61. Monteiro, R., Ferreira, J. C., & Antunes, P. (2020). Green infrastructure planning principles: An integrated literature review. _Land_, _9_(12), 525.

62. Morgan, D. L. (1996). Focus groups. _Annual review of sociology_, _22_(1), 129-152.

63. Mouratidis, K. (2021). How COVID-19 reshaped quality of life in cities: A synthesis and implications for urban planning. Land use policy, 111, 105772.

64. Mouratidis, K. (2021). Urban planning and quality of life: A review of pathways linking the built environment to subjective well-being. *Cities*, *115*, 103229.

65. Muijeen, K., Kongvattananon, P., & Somprasert, C. (2020). The key success factors in focus group discussions with the elderly for novice researchers: a review. *Journal of Health Research*, *34*(4), 359-371.

66. Mukherjee, M., & Takara, K. (2018). Urban green space as a countermeasure to increasing urban risk and the UGS-3CC resilience framework. *International Journal of Disaster Risk Reduction*, *28*, 854-861.

67. Mwonzora, G. (2022, September). Local governance and wetlands management: a tale of Harare City in Zimbabwe. In *Urban Forum* (Vol. 33, No. 3, pp. 309-328). Dordrecht: Springer Netherlands.

68. Nguyen, N. T., & Nguyen, L. (2023). Disentangling Environmental Justice Dimensions of Urban Green Spaces in Cities of the Global South. In *Bridging Peace and Sustainability Amidst Global Transformations* (pp. 149-178). Singapore: Springer Nature Singapore.

69. Niu, Y., Adam, M., & Hussein, H. (2022). Connecting urban green spaces with children: A scientometric analysis using CiteSpace. Land, 11(8), 1259.

70. Padawangi, R. (2012). The right to flood-free homes: urban floods, spatial justice and social movements in Jakarta, Indonesia. *Global Visions: Risks and Opportunities for the Urban Planet*, 199-211.

71. Papaioannou, T. (2021). The idea of justice in innovation: applying non-ideal political theory to address questions of sustainable public policy in emerging technologies. *Sustainability*, *13*(5), 2655.

72. Patterson, J. J., Thaler, T., Hoffmann, M., Hughes, S., Oels, A., Chu, E., ... & Jordan, A. (2018). Political feasibility of 1.5 C societal transformations: the role of social justice. *Current Opinion in Environmental Sustainability*, *31*, 1-9.

73. Potter, R. B., Darmame, K., Barham, N. and Nortcliff, S. (2009) '"Ever-growing Amman", Jordan: urban expansion, social polarisation and contemporary urban planning issues', *Habitat International*, 33(1), pp.81–92. doi: 10.1016/j.habitatint.2008.05.005.

74. Rahman, M. A., Hossain, M. Z., & Rahaman, K. R. (2023). Climate Urbanism as a New Urban Development Paradigm: Evaluating a City's Progression towards Climate Urbanism in the Global South. *Climate*, *11*(8), 159.

75. Reinwald, F., Haluza, D., Pitha, U., & Stangl, R. (2021). Urban green infrastructure and green open spaces: An issue of social fairness in times of COVID-19 crisis. *Sustainability*, *13*(19), 10606.

76. Reyes-Riveros, R., Altamirano, A., De La Barrera, F., Rozas-Vásquez, D., Vieli, L., & Meli, P. (2021). Linking public urban green spaces and human well-being: A systematic review. *Urban Forestry & Urban Greening*, *61*, 127105.

77. Romero, M. (2020). Sociology engaged in social justice. *American Sociological Review*, *85*(1), 1-30.

78. Rosenthal, M. (2016). Qualitative research methods: Why, when, and how to conduct interviews and focus groups in pharmacy research. *Currents in pharmacy teaching and learning*, *8*(4), 509-516.

79. Ryan, K. E., Gandha, T., Culbertson, M. J., & Carlson, C. (2014). Focus group evidence: Implications for design and analysis. *American Journal of Evaluation*, *35*(3), 328-345.

80. Sandifer, P. A., Sutton-Grier, A. E., & Ward, B. P. (2015). Exploring connections among nature, biodiversity, ecosystem services, and human health and well-being: Opportunities to enhance health and biodiversity conservation. *Ecosystem services*, *12*, 1-15.

81. Schindler, S., Mitlin, D., & Marvin, S. (2018). National urban policy making and its potential for sustainable urbanism. *Current opinion in environmental sustainability*, *34*, 48-53.

82. Sharifi, A., & Khavarian-Garmsir, A. R. (2020). The COVID-19 pandemic: Impacts on cities and major lessons for urban planning, design, and management. *Science of the total environment*, *749*, 142391.

83. Simões Aelbrecht, P. (2016). 'Fourth places': the contemporary public settings for informal social interaction among strangers. *Journal of urban Design*, *21*(1), 124-152.

84. Simone, A. (2020). Cities of the global South. *Annual review of Sociology*, *46*, 603-622.

85. Smart, A., & Smart, J. (2003). Urbanization and the global perspective. *Annual Review of anthropology*, *32*(1), 263-285.

86. Talen, E. (2000). Measuring the public realm: A preliminary assessment of the link between public space and sense of community. *Journal of Architectural and Planning Research*, 344-360.

87. Verheij, J., & Corrêa Nunes, M. (2021). Justice and power relations in urban greening: can Lisbon's urban greening strategies lead to more environmental justice?. *Local Environment*, *26*(3), 329-346.

88. Vives-Miró, S. (2022). The urbanization of poverty: rethinking the production of unjust geographies. Fennia-International Journal of Geography, 200(1), 41-51.

89. Vujcic, M., Tomicevic-Dubljevic, J., Zivojinovic, I., & Toskovic, O. (2019). Connection between urban green areas and visitors' physical and mental well-being. *Urban forestry & urban greening*, *40*, 299-307.

90. Wan, C., Shen, G. Q., & Choi, S. (2021). Underlying relationships between public urban green spaces and social cohesion: A systematic literature review. *City, culture and society*, *24*, 100383.

91. Ward, S., Staddon, C., De Vito, L., Zuniga-Teran, A., Gerlak, A. K., Schoeman, Y., ... & Booth, G. (2019). Embedding social inclusiveness and appropriateness in engineering assessment of green infrastructure to enhance urban resilience. *Urban Water Journal*, *16*(1), 56-67.
92. Whyte, HW (2000) How to Turn a Place Around. Projects for Public Space Inc.
93. Wolch, J. R., Byrne, J., & Newell, J. P. (2014). Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough'. *Landscape and urban planning*, *125*, 234-244.
94. World Health Organization. (2017). Urban green space interventions and health: A review of impacts and effectiveness.
95. Zeadat, Z. F. (2022). Urban Green Infrastructure in Jordan: A Perceptive of Hurdles and Challenges. *Journal of Sustainable Real Estate*, *14*(1), 21-41.
96. Zeadat, Z. F. (2023). Strategies toward Greater Youth Participation in Jordan's Urban Policymaking. *Journal of Sustainable Real Estate*, *15*(1), 2204534.
97. Zhang, L., Tan, P. Y., & Diehl, J. A. (2017). A conceptual framework for studying urban green spaces effects on health. *Journal of Urban Ecology*, *3*(1), jux015.
98. Zuniga-Teran, A. A., & Gerlak, A. K. (2019). A multidisciplinary approach to analyzing questions of justice issues in urban greenspace. *Sustainability*, *11*(11), 3055.