Feminization of the urban planning discipline: developing a gender responsive pedagogy at Ferdowsi University of Mashhad, Iran

Hossein Maroufi & Parsa Pahlavan

View supplementary material

Published online: 07 Feb 2024.

Submit your article to this journal

View related articles

View Crossmark data

Routledge
Taylor & Francis Group

Check for updates

Feminization of the urban planning discipline: developing a gender responsive pedagogy at Ferdowsi University of Mashhad, Iran

Hossein Maroufi [a] and Parsa Pahlavan [b]

aDepartment of Urbanism, Ferdowsi University of Mashhad, Mashhad, Iran; bDepartment of Architecture, Ferdowsi University of Mashhad, Mashhad, Iran

ABSTRACT

With the increasing number of female students enrolling and graduating from the Department of Urbanism at Ferdowsi University of Mashhad, Iran, this study aims to mainstream gender into urban planning pedagogy. This is achieved by analyzing a case study comprising 47 survey responses and seven follow-up interviews. Among other factors, respondents' perspectives on gender are more influenced by their personal experiences rather than the objective knowledge acquired through the Department's curriculum. Recommendations for the department to mainstream gender into the pedagogy are (1) mainstreaming gender issues in urban planning curriculum, (2) promoting gender-balanced department climate, (3) innovating around teaching methods, and (4) increasing awareness about the profession.

Introduction

In 2008, for the first time in history, the world's urban population exceeded the rural population. Since then, the majority of the global population has been residing in urban areas (United Nations Population Fund [UNPF], 2007). Despite the opportunities that urban living brings for women, including better social, economic, and political prospects, gender-based inequality persists in urban centres. This is evident in terms of access to employment, mobility, safety, tenure, and other essential aspects of urban life (Tacoli, 2013). In most developing countries, where the urban population is experiencing remarkable growth, women make significant contributions to the prosperity of cities. However, they are often the last to benefit due to prevailing gender inequality between women and men (United Nations Human Settlements Programme, 2012). This gap has been first publicized by the United Nations Decade for Women (1976–1985) and later highlighted through the biennale series of Global Reports on Human Settlements produced by UN-HABITAT in order to keep women and gender issues on international development agenda (see Reeves, 2014). More recently, 'gender mainstreaming[1]' has gained a new impetus in planning policies for sustainable development with the adoption of the 2030 Agenda for Sustainable Development in which, under Goal 5, the full

involvement of women is needed to achieve environment, economic, and social sustainability (United Nations, 2015).

While the international agenda for women has expanded in terms of planning policy, gender issues have not been explicitly incorporated into planning education. Reeves (2019)'s analysis of the planning course content in four Anglophone countries reveals that gender issues have often been incorporated implicitly into planning curriculum under the generic categories of 'diversity,' 'equity,' and 'inclusion'. These categories have been imbedded into a quite large volume of research on planning education, particularly in the global north (see Thomas, 1996; Looye & Sesay, 1998; Sweet & Etienne, 2011; Sen et al., 2017; Greenlee et al., 2018; Jackson et al., 2018; Diko et al., 2023). Most of these studies focus on race, ethnicity, and social justice as the most commonly cited dimensions of difference within planning education. However, a full treatment of planning education on gender – as one category of diversity – has received relatively little attention.

In many developing countries, the situation is far more complex, with numerous women still being deprived of full and equal opportunities for higher education due to systematic or customary subordination. Despite an increasing body of literature on the urbanization of the global south and the emerging issues of equity and inclusion, the incorporation of these concerns into planning education remains incomplete (Anand & Dutta, 2022). Furthermore, the 'developmentalism' rhetoric of states in many countries of the global south has resonance into planning education through physical planning and quantitative development (Pahlavan & Maroufi, 2023) with often no particular reference to human side and impacts of policies and decisions on women and minorities.

The study focuses on integrating gender into urban planning education at the department of urbanism at Ferdowsi University of Mashhad (FUM) in Iran. It examines gender mainstreaming as a variety of educational approaches (such as learning programs, policies, and educational objectives) aimed at fostering gender sensitivity within the urban planning curriculum. The goal is to enhance the self-esteem of female students, address stereotypes, and create an institutional environment that is responsive to women's concerns. Three main concerns inform the authors' intention to pursue this research: 1) in Iran has been a significant increase in the number of women enrolling in higher education over the past 50 years (Rezai-Rashti & Moghadam, 2011). In 1979, on the eve of the Islamic revolution, Iranian women accounted for 31% of all students enrolled in higher education (Statistical Center of Iran [SCI], 1982). By 2015, this number had risen to 67%, with women outnumbering men in many fields of study, including medicine, dentistry, and veterinary sciences (ibid). This higher educational attainment of women does not indicate that gender equality has been achieved in terms of job opportunities or access to decision-making positions (Rezai-Rashti & Moghadam, 2011); 2) In the field of urban planning education the once male-dominated program in the early 2000s have been substituted by much higher female entries. Despite the numeric dominancy of female students (and female graduates) in the discipline, the profession is deeply dominated by men, while women have a considerably low share in decision-making and managerial roles; 3) The official curriculum of urban planning program in Iran is approved by the Ministry of Science, Research, and Technology (MSRT) and is a required component for most higher education institutions in the country (FUM and very few other universities are exceptions).[2] Reviewing the aims

adopted for the official program, it becomes clear that the mainstream curriculum is totally blind to gender issues and the increasing number of enrolled female students in the program.

Considering these gaps, the authors' approach to integrate gender issues into urban planning pedagogy at Ferdowsi University of Mashhad is guided by the following aims:

(1) To reflect female students' perceptions of the need to address gender issues in urban planning education;
(2) To recommend programs and policies to the department to include gender issues in the existing curriculum, and
(3) To suggest strategies that create the department climate and learning context receptive to gender concerns.

Mainstreaming gender into urban planning: historical backdrops

Until the late 1960s, planning practice was overly homogenous, operating under the assumption that people were largely uniform in their needs and concerns (Healey, 1997). Most post-war urban planning tools were supposed to be gender-blind, whereas they systematically subordinated women and overlooked challenges that women face in urban areas such as urban services, public transportation, safety, tenure, health, etc. (Hayden, 1980; Moser, 1989; Rakodi, 1991; MacGregor, 1996; Manaugh et al., 2015; Lemaire & Kerr, 2017).

The rise of feminist scholarship – among other socio-economic changes – in the 1970s also contributed to planning discourses as scholars criticized the lack of policy attention to women's needs and the underlying gender inequalities in the city. These critiques in the 1980s found resonance in a discipline-specific body of work on 'women and . . .' (all planning sub-disciplines including: housing, land use, transportation, and economic development) which added women's perspectives and concerns at policy level and planning practice (Sandercock & Forsyth, 1992; Synder, 1995). These works revealed that women's views of the built environment were quite different from the often accepted, rigid, androcentric views. The types of solutions advocated by feminists, according to MacGregor (1996), vary from mixed-use zoning, walkable and accessible urban space, supply of care facilities, to flexible housing design and inclusive public transportation. The feminist critics were not only limited to the built environment as some scholars began to criticize the planning process and questioned the unequal power relation that exist in 'public' domain which reflects male value, masculine culture and excludes women from meaningful participation. It was not until 1990s that the dominant positivist epistemology of planning came under critique by feminist scholars and the need to integrate feminist epistemological works into planning theory was demanded (Sandercock & Forsyth, 1992; MacGregor, 1996). These feminist's critiques demanded for transformation and revision of processes, methodologies and the very conception of planning (Synder, 1995). Therefore, gender as a category of analysis provided new perspectives which made 'women visible not only as subjects of planning but also as active participants in planning and policy making processes' (Fainstein & Servon, 2005, p. 4). In this frame, gender issues have to be incorporated in all steps of urban planning and policy making to foster gender equality. The category of 'gender' was also expanded

to include not only women but also men, children, elderly, people with disabilities, racial/ethnic minorities, and sexual and gender minorities which expected the planning theory to consider this diversity seriously. Gender mainstreaming has now been widely recognized as a strategy to promote social justice and create a sustainable built environment by participation of both men and women in decisions, planning and design of urban environments. A recent initiative by the World Bank Group on 'Gender-Inclusive Urban Planning and Design' illuminates the relationship between gender inequality, the built environment, and urban planning and design and suggests guidelines and strategies to integrate gender concerns in urban planning and design processes and products (Terraza *et al.*, 2020).

Mainstreaming gender into urban planning education

Reflecting on urban planning from gender-based lens does not necessarily mean to increase the number of women in the field or encouraging more women to participate in planning process since, according to Larsson (2006), they might not necessarily promote this mindset. This is mostly because planners (male or female) are given more or less a similar conceptual framework – based on male view of the world – for practice whether through education or internal androcentric culture of the profession (Sandercock & Forsyth, 1992; MacGregor, 1996). Since the 1980s, a large volume of literature on multiculturalism, diversity, and differences in global urban centres of the late 20th century skewed planning discourses from economic development to global socio-cultural processes of change (see Sandercock, 1998a, 1998b). As a result of increasing cultural heterogeneity, a paradigm shift occurred in educational systems in the Anglo-Saxon world in which diversity (race, gender, ethnicity, etc.) and multiculturalism became necessary and justified through new accreditation standards for planning schools. Against mainstreamed-centred and male-dominated perspectives of planning and planning education, Thomas (1996) envisioned three phases of evolution in planning education: 'monoculturalism, pluralism, and unified diversity' (p. 175). The first phase has its roots in logical positivism in which planners are guided by value-free technical knowledge with no reference to race and gender. The second phase began in the 1960s when the rise of civil right movements pushed practitioners to take into account issues of justice and equity with regard to race and gender. Some planning educators in this phase adopted contents to address these issues albeit in a disjointed/fragmented manner which could cause prejudices and complaints by others. 'Unified diversity' is the third phase that goes beyond monoculturalism and disjointed pluralism in order to propose a desired stage where 'conflict falls to a minimum, and mutual learning rises to a maximum' (p. 177). In this visionary stage, diversity issues must be fully integrated into core planning curriculum in order to bring about changes at societal level. However, the generic language of diversity – which encompass all dimensions of difference from gender, ethnicity, and race to physical ability, sexual orientation, income, age, and language – has caused confusion for curriculum planners in terms of the depth and breadth of inclusion of each dimension in the curriculum, educational and methodological approaches, as well as the application of concept and theories. Therefore, the treatment of the issue of diversity is too reliant on individual educators which often overemphasize more familiar dimensions such as race and ethnicity than other neglected dimensions like gender, age, and physical ability.[3]

Several initiatives have been adopted by architecture and planning schools to respond to increasing demand for mainstreaming gender into their programs. One approach is to adopt a more qualitative, than quantitative, orientation in teaching and research in which scientific/technical knowledge and methods are accompanied with (or replaced by) life histories and individual experiences of students (see Garcia-Ramon & Ortiz, 2009). For example, drawing on the experience of the course on 'Gender, Culture and Space' – which required students to recognize gender biases in the use of places through fieldtrips – Van Hoven *et al.* (2009) argue that fieldtrips 'facilitated students' input into the course using their own everyday experiences and interests' (p. 88). Ahrentzen and Groat (1992) discuss the situations in which gendered practices occur in architectural education, especially in design studios where conventionally the 'mister-mastery-mystery' phenomenon, harsh hierarchical master/apprentice system, and masculine confrontative/competitive atmosphere prevail. As a new vision for gender-sensitive education, they suggest a studio pedagogy which is more collaboratively organized, less hierarchically structured, multifocal, diverse, and connected to social values. Similarly, Datta (2007) examines how gender differences play a role in motivation, courage, attitude, and confidence of learners in a particular design studio in a school of architecture in the UK. The results illustrate that male and female students do not benefit equally from the studio's learning model which does not provide an inclusive context for deep learning. The study recommends various strategies, from designing training programs for tutors to developing new assessment methods, in order to promote a learning context more inclusive to gender concerns (see Reeves, 2019).

Another initiative comes from the School of Architecture at University of Alicante, Spain, where gender mainstreaming is achieved firstly, through design, maintenance, and management of infrastructure and the built environment of the campus and secondly, through fostering of a learning atmosphere and empathy of students by 'implementation of gender perspective as a tool for the conception of complex, diverse and integrating projects, aligned to the objective of mutual care between people and the environment' (Parra-Martínez *et al.*, 2021, p. 1).

There are, however, several challenges faced by planning faculty to include a more gender-sensitive curriculum into planning programs. Despite efforts to integrate gender perspectives into planning education, according to Sandercock and Forsyth (1992), the resistance still exists in male-dominated faculties (and male-dominated classes) for the initiatives that highlight gender-related issues in theory and practice. Similarly, Sweet (2006), based on her academic experiences in Russia, the United States and Latin America narrates the way 'gender research or feminist perspectives are physically, philosophically, ideologically, and financially marginalized' due to structural barriers that marginalize all women and particularly women of color (p. 146). Even in a very liberal and progressive country like the Netherlands, Van Hoven *et al.* (2009) narrates how the initiatives by feminist geographers in Dutch universities to introduce gender courses in geography disappeared after few years due to lack of interest in socio-cultural processes in Dutch geography (in comparison to spatial economic issues), the lack of attention to gender issues in public debates, and the lack personal experiences of gender discrimination by students.

Study context: the vantage point to address gender concerns in urban planning pedagogy at Ferdowsi University of Mashhad

In the past century, rapid urbanization and the expansion of urban areas have created new opportunities and challenges for the field and practice of urban planning in Iran and other developing nations. This has led to an increased focus on understanding and addressing the complexities of urbanization and its impact on various aspects of society and the environment (Bahrainy & Fallah Manshadi, 2017). The undergraduate program in urban planning (known as *Karshenasi-e Shahrsazi)* was established in 2000 in Iran. Long before this, the program was initiated at a master level at a few major universities in Iran and at a doctoral level at the University of Tehran. However, due to the low number of enrolments and lack of public awareness of the profession, very few significant impacts were made by urban planners on the built environment in comparison with those made by other specialists, particularly architects and civil engineers (Maroufi *et al.*, 2021).

The undergraduate program of urban planning was established in 2005 at Ferdowsi University of Mashhad, marking the first public academic center in the region of East Iran to offer such a degree program. Over 300 students have graduated with an undergraduate degree in urban planning from the department of urbanism by the summer of 2022. The department also attracts numerous international students, particularly from Middle Eastern and neighboring countries, with a significant number coming from Afghanistan and Iraq. As a prominent academic institution in Iran, the department of urbanism plays a pivotal role in spreading knowledge on built form throughout East Iran, the Shia world, and Central Asia. It has set out to promote cultural diversity, raise environmental awareness among the public, and spearhead urban planning initiatives in the city of Mashhad (Faculty of Architecture & Urbanism [FARU], 2018).

The study is part of a broader initiative to diversify the architecture and urban planning curriculum in the Faculty of Architecture & Urbanism at FUM. This journey commenced with the internationalization of the two programs as a strategic move by FUM to boost international student enrollment. This was accompanied by a thorough revision of the urban planning curriculum at the undergraduate level. In both projects, it became clear that the mainstream curriculum does not reflect the *de facto* diversity that is slowly emerging in architecture and urban planning programs, such as 'the increasing number of enrolled female students and the increasing demand for internationalization of the two programs' (Pahlavan & Maroufi, 2023, p. 66). The former issue is alarming as through the summer of 2022, female students comprised 74% of the total number of students who completed their degree program in the department of urbanism. Figure 1 illustrates the share of female students (as a percentage of the total number of students in each entry year) enrolled at FUM's undergraduate program in urban planning (blue bars) and the share of female students graduated from the same program (red bars) in each entry year. The chart indicates women have higher rates of the program enrolment and graduation than men. Notably, in one academic year (2008), the graduation rate was particularly high at 93.8% for female urban planning students. The chart also indicates that the program dropouts were higher among male students in each entry which has resulted in an increase in the representation of female graduates.
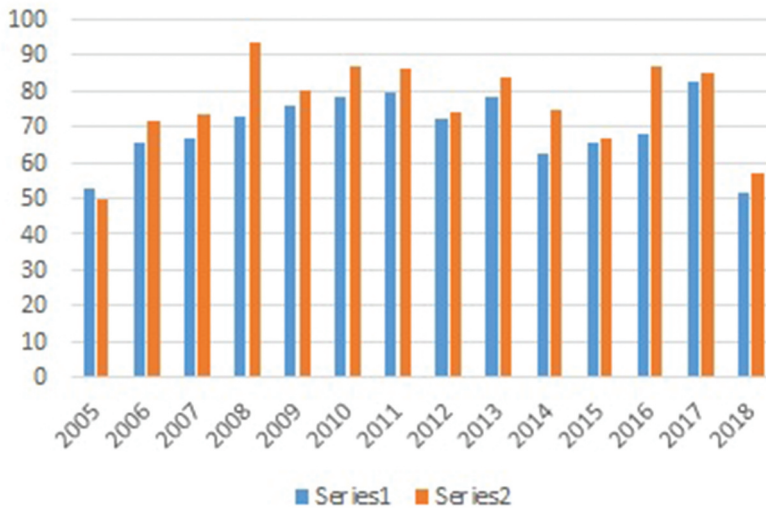
Figure 1. Percentage of female entries and graduated from urban planning program.

Research methodology

Based on the aims of this research, it is considered an applied research which is a type of research design that seeks to solve a specific problem or provide innovative solutions to problems affecting individuals, groups, or society (Ary *et al*., 2010). In education, applied research is used to test educational processes in order to discover the best teaching and learning methods. Applied educational research tries to solve the problem by collecting data from primary sources or using a combination of quantitative and qualitative data collection methods (Cohen *et al*., 2007). These data serve as empirical evidence and are then carefully analyzed to get a valid conclusion.

In this research, both quantitative (online questionnaire) and qualitative (follow-up discussion panel) methods were employed in order to assess participants' perspectives on gender mainstreaming in urban planning pedagogy. After conducting a preliminary review of existing studies on gender and urban planning education, the authors organized a two-hour discussion panel on 13 November 2022, with six female volunteers to listen to their stories and concerns to understand how they perceived/perceive gender issues whether at the department or at work. A call was announced on Telegram channel of the department's alumni in advance in order to collect volunteers. Three volunteers were master students in urban design that also had completed their undergraduate degree at FUM and the other three were FUM's degree holders with working experiences in the public and private sector. At the meeting, the volunteers were informed about research aims and were asked to discuss the way women's issues have resonance in their everyday practice of urban planning. Participants were involved in an unstructured discussion in which they were even allowed to interrupt each other and reflect on their peers' opinions. The panel aimed at identifying the main themes which were later integrated into existing literature on gender-related planning studies in order to construct the questionnaire. Inputs from Greenlee *et al*. (2018) survey on climate for diversity among students in

urban planning degree programs in the United States were also adopted to finalize the questionnaire.

The questionnaire was organized in three sections (see Appendix 1). In the first section, participants were asked about their academic and professional background, their aspirations for future employment in different planning domain, and their perception of discrimination in their work environment. The second section includes questions about participants' experiences and interactions within the department at FUM. In the third section, urban planning curriculum and its sensitivity to gender issues became a subject of survey by participants. Based on previous studies (Friedmann, 1996; Poxon, 2001; Frank *et al.*, 2014; Bahraini & Fallah Manshadi, 2016; Maroufi *et al.*, 2021), 15 categories[4] for urban planning knowledge were identified, and participants were asked to rate each category considering its sensitivity to gender issues. The survey also included open-ended questions asking participants to add their own perspectives on the issue of gender and urban planning pedagogy. When completing the online survey, respondents were offered the opportunity to participate in a roundtable discussion. Interested respondents were then contacted by email to schedule a meeting. In the meeting, participants were asked about their reflections on the results of the questionnaire, their experiences of bias and discrimination whether in the department or at work, and were asked to provide suggestions for improving the situation of women in the profession.

According to the project aims, the statistical population included those FUM's undergraduate degree holders (females only) who were either active in the profession or were pursuing higher degrees (not necessarily at FUM) and had a part-time or voluntary working experiences in the field at the time of conducting the survey. Male graduates were excluded from the survey for two main reasons: 1) the very small number of male graduates as a statistical sample could compromise the analyses drawn from the study and 2) gender mainstreaming, as defined in this paper, is centered on women and aims to reflect female students' perceptions of the need to address gender issues in urban planning pedagogy.

The email solicitation contained the description of research aims and a survey link, to send to a hundred female urban planning degree holders on 2 February 2023. The roundtable discussion was conducted on 13 March 2023 in the department of urbanism at FUM. Three of the department's lecturers (who are also female practitioners in the public and private sector) were invited to the discussion to moderate between the participants. The discussion started with presentation of the survey results and continued with reflection first from students and then by lecturers in order to ensure everyone participated.

Results

Educational background and professional career preference

A total of 47 survey responses were collected and 7 respondents participated in the roundtable discussion. All respondents in the survey obtained their degree between 2015 and 2022 from Ferdowsi University of Mashhad. About 60% of respondents are pursuing graduate studies at a master or a doctoral level. On average, survey respondents had almost 19 months of working experiences in urban planning fields as GIS expert, land-

use consultant, urban designer, transport planner, college/university instructor, intern, and technical expert.

In the latter part of the section one of the questionnaire, participants were asked about their aspirations for their future working context (5-year vision) and to clarify whether their choices are related to their gender. The distribution of responses to this question is presented in Table 1. The results indicate a large gap between the willingness to work in the public and private sector. The majority of respondents are not likely to work in the public sector (municipal/provincial planning agency and Pishkhan Municipal Agency) in the next 5 years, while academic institutions, private consulting firms and EBCO are desirable working context according to respondents. Majority of respondents considered the public sector a very androcentric working environment where there are more opportunities for employment and job promotions for men. Here are reflections by respondents and interviewees:

> Unfortunately, there persists a belief that engineering jobs[5] are more suitable for men, and in terms of recruiting and hiring, the recruitment is mostly for men.

> In the public sector, women are looked down upon by men . . . they are underestimated . . . for example, in meetings when a woman presents a project, men easily interrupt her and ask her several questions . . . This is annoying!

> As an early career, my area of influence in the public sector is extremely limited, and most decisions in the public sector are made by men regardless of their professional competences.

> It takes an urban planner a while to achieve a place in public sector. If someone is assertive, patient, and resilient then they will likely find a place in the profession, but unfortunately most women lack these attitudes.

Another group of responses addressed the rigid frameworks including dress-codes and certain code of conduct that particularly narrow interpersonal interactions for women in the working environment:

> One of the major and main reasons for my disinterest in working in public domain is inflexible and rigid working environment (from working hours to code of conduct)

About 20% of respondents indicated their choice of future working context is conditioned by their personal considerations and not necessarily by their gender. Yet, they indicated their disinterest to work in the public sector due to following reasons:

Table 1. Distribution of responses to participants' aspirations for future working context.

	Very likely	Likely	Somewhat likely	Unlikely	Very unlikely
Municipal Planning Agency	12.5%	20.8%	18.7%	29.1%	18.7%
Provincial Planning Agency	11.1%	17.7%	13.3%	33.3%	24.4%
Engineering & Building Control Organization (EBCO)	26.6%	22.2%	40%	4.4%	6.6%
Private Consulting Frim	23.4%	29.7%	17%	21.3%	8.5%
Academic Institutions (Schools/College/University)	35.4%	20.8%	14.5%	14.5%	14.5%
Pishkhan Municipal Agency	0	2.1%	23.4%	31.9%	42.5%
NGOs	6.5%	28.2%	28.2%	17.3%	19.5%
Law Firm	4.3%	15.2%	26%	30.4%	23.9%
Non-related to Planning	23.4%	21.2%	23.4%	12.7%	19.2%

Working in the public sector means leaving behind all the knowledge and principles that one learned in the university.

Decisions in the public sector are often manipulated by asymmetric power relations. This is in contrast with the ethical frameworks that are taught in universities.

The public and private sector employers have different expectations from urban planning graduates. In the private sector, even if you are a fresh graduate, you have a room to ameliorate yourself and learn. But in the public sector, due to the administrative environment, nothing is generally added to your prior planning knowledge. Employers in the private sector generally expect a graduate to have sufficient mastery in technical-analytical and software skills, but in the public sector, communication and management skills are more important.

According to the results, the majority of female graduates were not motivated to work in the public sector, particularly in decision-making roles, due to reasons such as the rigid working environment, gender-based stereotypes, and the perception of being undervalued and disengaged. While participants did not explicitly indicate a direct correlation between urban planning education in the department and their preference for working context, they implicitly referenced specific skills, such as communication and organizational skills, as essential for roles in the public sector.

In the last two questions of section I, participants were asked whether they agree that men have a smoother path to success than women in the planning field and whether they consider planning tools and techniques to be mostly aimed at men. The distribution of responses to these questions is presented in Table 2. Respondents indicated that, as most policy makers come from fields other than planning, success in urban planning practice is not solely dependent on gender. However, a few respondents criticized the content of urban development plans in Iran for perpetuating this mindset. Here is a reflection from one respondent:

Gender issues are absent in the content of urban planning profession in Iran since urban development plans' (master plans and comprehensive plans) contents lacks a framework for considering issues on social justice (including gender, ethnicity, . . .). Therefore, the output of all development plans is more or less a land-use map which is very gender blind.

Department's climate and gender awareness

In section II of the questionnaire, participants were asked to rate their experiences in the faculty and department in regard to gender issues. The results are as following:

Table 2. Distribution of responses to participants' opinion on gender and the working context.

	Strongly agree/ agree	Quasi disagree/ disagree	I don't have any opinion
Men have smoother path to success than women in the field of planning	38.5%	53%	8.5%
Planning tools and techniques are mostly aimed at men	12.9%	85%	2.1%

Q: The Faculty of Architecture & Urbanism provides equal opportunities, facilities, and services to both male and female students:

Eighty percent of respondents agree that the department of urbanism does provide equal opportunities, facilities, and services to both male and female students.

Q: Issues and challenges related to gender can be seen in educational, research, and cultural programs of the Faculty of Architecture & Urbanism:

Seventy percent of respondents felt that the faculty of architecture & urbanism does not consider gender issues in its programs including research, education and other socio-cultural events. One respondent reminded that her attempt to incorporate gender into her final graduation project was discouraged by her supervisor:

   I was told that 'gender' is a stale topic that eventually ends up in women's safety in public space. It does not generate a good research topic.

Q: Gender diversity exists in teaching staff (faculty members, visiting lecturers, and teaching assistants) in the department of urbanism:

Sixty-four percent of respondents agree that gender diversity exists in teaching staff of the department of urbanism. Indeed, almost over 90% of teaching assistants in the department are female. Yet, all full-time tenured staff is male.

Q: Teaching staff in the department of urbanism consider gender-related topics in their course materials:

Seventy-eight percent of respondents believe that gender issues have not been reflected in the pedagogy by the teaching staff. Indeed, reviewing the official syllabi reveals that issues related to social justice have very low representation in urban planning curriculum (Maroufi *et al.*, 2021). Interviewees highlighted those materials and methods they learnt in courses and planning studios were not responsive to real-life planning challenges in Mashhad. Land-use methods, for instance, were mentioned by several participants as quite obsolete in dealing with challenges of informal settlements, including those related to gender.

Q: Teaching staff in the department of urbanism are aware of challenges faced by female students in planning studio/laboratory courses:

Sixty percent of respondents expressed their disagreement. Despite high number of female teaching staff in the department, the laboratories are all taught by male tenure staff that might not be familiar with female students' concerns during fieldwork. In interviews, participants expressed their fears and obstacles in their fieldworks particularly

in 'sketchy' neighborhoods which could delay their project, while instructors/employers would expect the same amount of work regardless of gender.

Q: I feel comfortable working in groups with male peers in projects:

Seventy percent of respondents agree that they feel comfortable working with their male peers on projects.

Urban planning curriculum and its sensitivity to gender-related issues

In the first part of this section, participants were asked whether they consider gender to be a high-priority issue in urban planning pedagogy in comparison to the environment and informality. The last two issues were deliberately mentioned as they are currently critical urban planning challenges in Iran, especially in Mashhad. The distribution of responses to this question is presented in Table 3. The authors anticipated that most participants would select 'very important' and 'important' choices, considering they were all female and underrepresented in the planning system. However, during the roundtable discussion, it became evident that the participants were implicitly expressing the significance of gender in addressing critical issues, including informality and the environment. For example, a participant who was conducting her master's thesis on the women and health in Mashhad's informal settlements highlighted that the concern for women's safety in public spaces has led to their immobility and eventual health problems. Another participant remembered that in a meeting at Urban Regeneration Corporation (URC) it was mentioned that 'in order to establish entrepreneurship in informal settlements, it is necessary to consider women as the main target group since they contribute not only to the economy but also to ameliorating social issues.' Yet one of participants criticized the way women's domestic occupation in informal settlements is not recognized by labor law, while many of these women are also heads of household.

Throughout the discussion, it was clear that most participants, through their working experiences, acquired a preliminary insight about the role that women could play in urban planning and development, however, this has not been backed up by knowledge they acquired in the department or through the curriculum. The participants were very excited to express themselves and found the discussion very insightful and motivating.

In the last question of section III, respondents were asked to determine the importance of gender (with a focus on women) in each area of urban planning knowledge (Table 4). The 5-point Likert scale was employed to determine the level of importance assigned to each area of knowledge. The weight assigned to different responses ranges from 5 = Very Important (VI); 4 = Important (I); 3 = Moderate (M); 2 = Slightly Important (SI); and 1 = Not Important (NI).

Table 3. Gender as a high priority issue in urban planning education.

	Very important	Important	Moderately important	Slightly important	Not important
Q	8.5%	27.7%	34%	21.3%	8.5%

Table 4. The importance of gender (with a focus on women) in each area of urban planning knowledge.

Urban planning knowledge	VI (5) WV	I (4) WV	M (3) WV	SI (2) WV	NI (1) WV	N	SWV	GKI
1 Environment	9% 20	18% 32	32% 42	32% 28	9% 4	44	126	2.86
2 Urban economy	13.6% 30	52.3% 92	13.6% 18	16% 14	4.5% 2	44	156	3.54
3 Urban sociology	71.2% 160	26.6% 48	0 0	0 0	2.2% 1	45	209	4.6
4 Sustainable environment	21.4% 45	23.8% 40	33.3% 42	14.3% 12	7.2% 3	42	142	3.38
5 History and theory of urban planning	18% 40	30% 52	25% 33	16% 14	11% 5	44	144	3.27
6 Urban regeneration	11.6% 25	21% 36	32.4% 30	28% 24	7% 3	43	130	3
7 Transport and Infrastructure planning	29.5% 65	31.9% 56	22.7 30	15.9% 14	0 0	44	165	3.75
8 Housing	21.5% 45	35.7% 60	21.5% 27	16.6% 14	4.7% 2	42	148	3.50
9 Urban management and law	44.5% 100	37.8% 68	0 0	11.2% 10	6.5% 3	45	181	4
10 Geography and regional planning	9.3% 20	23.2% 40	30.3% 39	30.2% 26	7% 3	43	128	2.9
11 Urban planning methods and techniques	16.3% 35	32.5% 56	25.5% 33	21% 18	4.7% 2	43	144	3.34
12 Urban design methods and techniques	34.1% 75	36.4% 64	11.3% 15	11.3% 10	6.9% 3	44	167	3.80
13 Design of the built environment	36.3% 80	43.2% 76	6.8% 9	11.4% 10	2.3% 1	44	176	4
14 Quantitative methods	6.6% 15	15.5% 28	33.4% 45	31.1% 28	13.4% 6	45	122	2.70
15 Research methods for urban planning	18.6% 40	30.2% 52	23.2% 30	14% 12	14% 6	43	140	3.20

To achieve the summation of weighted value (SWV) for each area of knowledge, the number of responses for each scale was multiplied by the assigned weight and then added all together. Then, the summation of weighted value for each area was divided by the total number of responses in order to obtain gender-sensitive knowledge index (GKI) for each category of urban planning knowledge. The arithmetic mean GKI is 3.45 with standard deviation of 0.49. In the final step, the z-score was calculated for each category. The z-scores method is used to determine those categories that rank either higher or lower than the mean GKI. A category with GKI higher than the mean indicates that, according to respondents, gender is considered an important issue in the category. According to results urban sociology (2.34), urban management & law (1.12), environmental design (1.12), urban design methods & techniques (0.7), urban transport & infrastructure (0.6), urban economy (0.18), and housing (0.1), respectively, are gender-sensitive categories according to respondents. Although there is almost no reference to gender in the department's courses that represent these categories, the respondents have realized, through experiences, the gender disparity that exists in practice for each category. For instance, in the category of housing, interviewees indicated the androcentric ambient, where, from policy making, to planning, design, and to construction, women are often being under-represented. In the category of urban transportation, interviewees criticized the very

engineering approach of transport courses in the department which do not reflect the prevailing social aspects – especially in relation to gender. Urban management & law is another category with high GKI where in reality gender-differentiated concerns are not reflected and the ability of women to influence laws, policies, and governance is very limited. As stated by the United Nations Human Settlements Programme (2015), unequal power distribution between men and women through national laws and legislation limits women's equal access and participation in urban governance. In addition, societal structure and customary practices deny women to be equal participants in every aspect of daily life from education, to work, and to public and political life. A participant in a first round of interview related women's absence in managerial positions to customary norms and practices by stating that:

> Perfectionism in women is a part of Iranian culture that has influenced women's performance on an everyday basis. That is why the fear of making mistakes, and being judged, is more common among women. This, in addition to other major social and legislatives barriers, prevents women from getting engaged in public and political life.

Discussion and recommendations

The data presented in the previous section suggest a compelling need to incorporate gender perspectives into urban planning pedagogy at the department of urbanism at Ferdowsi University of Mashhad. From the questionnaire survey and the roundtable discussion, three challenges related to gender mainstreaming in urban planning pedagogy are observed:

(1) 'Cognitive bias[6]' and distancing from the public sector (gap between planning education and planning practice)

Blind approach to gender concerns in urban planning education has caused an implicit sense of confusion and paradox among many female degree holders in a profession that has been shaped by male experiences and values. This unconscious confusion has resulted in the formation of cognitive bias[7] (error) among female graduates which prevents them from determining their positionality in the field, self-identifying themselves as 'women planners,' and working in the public sector as decision-makers. As reflected in questionnaire and interviews, the gap between knowledge and skills acquired through the curriculum in the faculty and those required for planning practice in the public sector, has confused female graduates in terms of self-understanding and visibility. The majority of respondents in the survey expressed their disinterest to work in the public sector since they feel to be insignificant and underrated due to certain gendered (and non-gendered) mindsets such as 'perfectionism,' 'fear of judgment,' 'societal expectations,' and 'ethical considerations.'

A curriculum that is highly focused on technical tools and planning methods – without considering social values – does not equip graduates with the skills needed to work in the public domain where mediation, negotiation, moderation, and communication are strongly needed. In addition, the field of urban management (from urban governance to public policy and planning law) is quite unknown for urban planning students (both male and female) and courses dealing with these topics are often electives, focusing on

theoretical concepts without considering the real ongoing complexities and contradictions in concrete planning activities.

   (2) Lack of awareness about the nature of the discipline and the role of urban planners in the profession

Urban planning is not perceived as an independent, clear, and well-defined profession among general population. Even among planners (from academia, to policy makers and practitioners) there is no consensus over what planning is and what planning professionals are expected to do (Gohari, 2023). On the other hand, urban planners often have to work side by side with other better-known specialists including architects, civil engineers, geographers, sociologists, etc., which make confusion about the purpose, role, and task of planning as a profession. This unclear nature of the profession, according to Palazzo et al. (2021), has prevented the young generation to consider urban planning as a career preference in the future.

   In Iran, urban planners do not have a role in decision-making or policy making, so they cannot be a change-maker in their communities. In addition, there is a mindset that working in the public sector requires special privileges, and meritocracy does not necessarily play a fundamental role for being employed in the public sector. Because of this mindset, parents do not encourage their children to enter university programs that are somehow related to the public sector. This could demotivate those with real interests in urban challenges and could foment the cognitive bias described in the previous section.

   With significant decline in the number of male students and high number of dropouts by male students, increasing professional awareness is a task that must be carried out by the department in order to tackle gender-imbalance and to motivate those who choose planning as a profession. A diverse educational setting could promote credibility and legitimacy for planning (Sweet & Etienne, 2011) which would enhance the position of planners in public realm.

   (3) Narrow perspectives on gender mainstreaming in urban planning education

The results revealed a varied range of understandings of gender issues in urban planning curriculum. Both respondents and interviewees acknowledged the gendered nature of planning practice and policy making. However, their understanding is based more on their personal experiences (experiential knowing) rather than objective knowledge acquired in the university through curriculum. Unfortunately, in Iran, engineering mode of thinking still dominates urban planning education which has reduced the role of urban planners to technicians and analysts. Very few subjects/courses are specifically devoted to social justice, exploring the notion of diversity (including gender, ethnicity, and race) in urban planning education. The high Gender-sensitive Knowledge Index categories, which mentioned in the previous section, represent very few courses in the curriculum, while other potentially gender-sensitive categories of knowledge (including the environment, urban regeneration, geography, research methods, and land-use planning) were underrated by respondents. In the course of interviews, few participants casted a doubt on the impact of gender on the environment or research methods and

eventually asked for concrete examples in which the environmental decisions are gendered. Since environmental considerations and qualitative research methods have very few reflections in urban planning practice in Iran, therefore, the general perception of these concepts lacks a gender-sensitivity. This is in contrast with many global literatures that focus on different considerations of gender and environment as a strategy to achieve a just, equitable, and sustainable future (Ahmad *et al.*, 2010). In addition, literature suggests that qualitative research methodology based on life histories and individual perspectives is replacing statistical data and quantitative methods which brings new perspectives for including gender concerns in the environment (Garcia-Ramon & Ortiz, 2009).

The following recommendations are provided for the department of urbanism at Ferdowsi University of Mashhad in order to mainstream gender into urban planning pedagogy.

- Providing opportunities for career advancement for female graduates in the public sector

Enhancing the position of female planners in the public sector can be achieved through implementing mentorship programs, leadership training, internships, and co-creative pedagogies. In the department of urbanism, female students should explore future career opportunities with mentors, who could be successful women in the field, while recent female graduates can get insight into how to develop a career path and to establish connections for future employment. Mentoring provides opportunities for students to learn from one another's personal stories, to share inspiration and encouragement, and to build their social-professional networks. The department could promote leadership trainings as extra-curricular activities by organizing TEDx programs involving successful female managers/practitioners in planning and other related fields in order to increase female students' self-confidence. In addition, internship programs in the public sector could be an opportunity for female students to experience real-world challenges in planning; whilst certain skills particularly communication and managerial skills are enhanced during internship programs. This could be achieved through establishing ties and cooperative agreements with the municipality, the city council, and other public institutions in Mashhad. Co-creative[8] planning pedagogy is another initiative that could be adopted by the department to circulate and exchange knowledge between students, academics, and practitioners about real-world issues and challenges. This educational innovation could enhance students' competence to deeply engage with power structures in a multi-actor learning environment (see Van Karnenbeek *et al.*, 2022).

- Improving awareness about the profession and promoting gender-balance in urban planning program's entries

The lack of exposure to planning as a career path for youth is a first barrier to create more opportunities for diversity in planning education. To improve awareness about the profession, the department could collaborate with high schools to design creative programs that are of interest to students and that encourage them to consider urban planning as a future career (see Palazzo *et al.*, 2021; Hollsetein *et al.*,

2023). Initiatives could include hosting school visits, organizing summer camps/ workshops, and informing school counselors about the nature of urban planning profession and the potential career opportunities for this discipline. An increase in the number of male students' entering into urban planning program would promote the needed gender diversity that lacks at the moment in the department of urbanism at Ferdowsi University of Mashhad. Gender diversity enriches planning discourses and creates a vibrant learning environment within the faculty where both male and female students share their perceptions of the built environment and improve their interpersonal communication skills (see Looye & Sesay, 1998). Therefore, improving awareness about urban planning in a broader scale would also enhance the diversity that the discipline needs in order to make changes at communities.

- Mainstreaming gender into urban planning curriculum

Whilst the gendered nature of planning policies and practices has been confirmed through the personal experiences of the respondents, its relevance has not been reflected in the pedagogy. There is a role for the faculty to incorporate gender issues in both the curriculum and the department's pedagogical activities. Students should gain insight about the values around advocacy, equity, and social justice in different subfields of planning including land-use plans, urban laws, urban design, environmental assessments, urban regeneration, and urban transport in both theory and practice. In addition to traditional lectures and readings on 'gender and …' (different planning subfields), new teaching methods like in-depth classroom discussions, inviting guest speakers, storytelling, fieldtrips, role-play, walking tour, co-creations, and documentaries should be developed to nurture students' critical thinking (See also Jackson *et al.*, 2018) and to overcome cognitive biases that demotivate students. In order to design a gender-responsive pedagogy, instructors could equip students with the necessary skills to relate knowledge they acquire in classes to real-world planning challenges and issues. This aim could be achieved through planning studio courses as 'the backbone of the architecture and urban planning curricula in Iran' (Pahlavan & Maroufi, 2023, p. 73). Currently, planning studios comprise a variety of topics – from land use planning and transport planning to neighborhood planning/design and urban land development projects; aiming at enhancing students' general skills in presentation (visual, oral, written), qualitative/ quantitative analysis, land use planning and design methods. Defining demand-oriented topics for planning studio's projects in collaboration with planning practitioners could place planning students into a situation where studio courses intersect with the 'real-world' of planning. Through this approach, experiential learning[9] is enhanced by establishing dialogue and by exchanging knowledge between students, academics, and practitioners (see Baldwin & Rosier, 2017). When both gender and experiential learning are integrated into planning studio curriculum, students' perception of planning and the role women can play therein will change. The survey results highlight the need to revise planning studio pedagogy in order to address conceivable challenges related to gender in the city of Mashhad.

- Promoting gender balance in the faculty positions

Despite the fact that almost 90% of teaching assistants and lecturers in the department of urbanism are female, all full time tenured positions in the department belong to men. The latter, however, decides on the entire curriculum development, pedagogical approaches and extracurricular activities in the department. In order to mainstream gender equality in education, women need to have a direct and active role in decision-making. One recommendation would be to create procedures that allow assistants to be promoted, creating quotas so that more women can rise to positions of greater influence in the program.

Conclusions

The findings of this study complement other studies that have been carried out on diversifying urban planning education, increasing professional awareness, and promoting departmental climate toward diversity. As indicated in this study, the numeric dominancy of women in the program has not necessarily led to awareness of the gendered nature of planning and a department climate sensitive to gender diversity. Nor has it elevated the role of women in decision-making and planning practices, particularly in the public sector.

It might look unrealistic to expect that the department tackle the structural gender bias and discrimination that exists due to legal frameworks, policies, and customary practices in Iran. Yet, the existing department can acknowledge the consequences of this and take critical steps to address the challenges of gender diversity within the discipline by adopting various strategies that have been discussed in this study. These strategies are (1) mainstreaming gender issues in planning curriculum, (2) promoting gender-balanced department climate, (3) innovating around teaching methods, and (4) increasing awareness about the profession. As these steps become embedded in the vision of the department, further discourses on diversity and equity will emerge that will provide frameworks to understand their contribution to planning education.

However, focusing on women as a target group in defining gender mainstreaming should not overlook the fact that both males and females are part of the process of bringing about gender equality within urban planning education. Future work at the department should address the barriers that cause males to drop out from the program as well as their disinterest in considering urban planning as a career preference. It is also important to deeply understand the reasons behind female students' 'cognitive bias' and their lack of awareness about the gendered nature of planning education; a factor that prevents them from seeing themselves as, first and foremost, a woman planner.

By exploring men's and women's expectations, needs, and perceptions in the built environment, urban planning education can be relevant and effective in responding to real emerging challenges that are not resolvable by land-use plans.

Notes

1. According to the Council of Europe (1998) gender mainstreaming is 'The (re)organisation, improvement, development and evaluation of policy processes, so that a gender equality perspective is incorporated in all policies at all levels and at all stages, by the actors normally involved in policy-making.'

2. In 2016, the MSRT enacted the 'Delegation of Curriculum Planning Authority to Universities' statute, empowering select academic centres in Iran (listed as grade I and II) to revise their curriculum. This regulation aimed to align the curriculum with the society's present and future requirements, update it in line with advancements in human knowledge, and tailor it to the specific needs of the academic centres.

3. See Reeves (2019)'s commentary on making 'gender' explicit to planning core curriculum.

4. These categories are environment, urban economy, urban sociology, sustainable environment, history and theory of planning, urban regeneration, transport and infrastructure planning, housing, urban management and law, geography and regional planning, urban planning methods and techniques, urban design methods and techniques, design of the built environment, quantitative methods, research methods for urban planning.

5. For international audience it is necessary to highlight that in Iran urban planning discipline is considered as subcategory of the broader engineering domain.

6. We are grateful to PhD. adeh Hosseini for drawing our attention to this keyword.

7. Cognitive bias is a systematic pattern of deviation from rationality in judgment in which decision making and judgment of individuals is framed on a series of pre-assumptions and initial information that are often conditioned by common norms and beliefs (see Haselton *et al.*, 2005)

8. Co-creative planning pedagogy is understood as 'a process in which various actors mutually exchange knowledge in an educational context' (Van Karnenbeek *et al.*, 2022).

9. Experiential learning is 'an instructional approach through which learners apply their knowledge and understanding in an integrated manner, to real-world complexities and challenges' (Shroff *et al.*, 2021).

Acknowledgement

Disclosure statement

ORCID

Hossein Maroufi 🔟 http://orcid.org/0000-0003-1857-5710
Parsa Pahlavan 🔟 http://orcid.org/0000-0002-8008-4544

References

Ahmad, N., Diamond, N., Clarke, M., & Adams, N. (2010) *Gender and Environment* (Washington, DC: The World Bank Group).

Ahrentzen, S., & Groat, L. (1992) Rethinking architectural education: Patriarchal conventions & alternative visions from the perspectives of women faculty, *Journal of Architectural and Planning Research*, 9(2), pp. 95–111.

Anand, G., & Dutta, N. (2022) In a state of flux: Urban planning programmes in Asia and Africa, in: G. Alem Gebregiorgis, S. Greiving, A. H. Namangaya, & W. J. Kombe (Eds) *Planning Cities in Africa. The Urban Book Series*, pp. 71–102 (Cham: Springer).

Ary, D., Jacobs, L. C., & Sorensen, C. (2010) *Introduction to Research in Education*, 8th ed. (Wadsworth: Cengage Learning).

Bahraini, H., & Fallah Manshadi, E. (2016) Analyzing similarities and differences of urban planning knowledge in Iran and other countries with emphasis on undergraduate level, *Iranian Journal of Engineering Education*, 17(68), pp. 127–138.

Bahrainy, H., & Fallah Manshadi, E. (2017) The most important skills an urban planner needs in a developing country; The case of Iran, *Planning Practice & Research*, 32(4), pp. 466–477. doi:10.1080/02697459.2017.1378863.

Baldwin, C., & Rosier, J. (2017) Growing future planners: A framework for integrating experiential learning into tertiary planning programs, *Journal of Planning Education and Research*, 37(1), pp. 43–55. doi:10.1177/0739456X16634864.

Cohen, L., Manion, L., & Morrison, K. (2007) *Research Methods in Education* (London: Routledge).

Council of Europe (1998) *Gender Mainstreaming, Conceptual Frameworks, Methodology and Presentation of Good Practices* Final Report of Activities of the Group of Specialists on Mainstreaming, Strasbourg: Council of Europe.

Datta, A. (2007) Gender and learning the design studio, *Journal of Education in the Built Environment*, 2(2), pp. 21–35. doi:10.11120/jebe.2007.02020021.

Diko, S. K., Hollstein, L. M., & Palazzo, M. (2023) *Routledge Companion to Professional Awareness and Diversity in Planning Education* (New York: Routledge).

Faculty of Architecture & Urbanism (FARU) (2018) *Revision of Strategic Framework of the Faculty of Architecture & Urbanism-Ferdowsi University of Mashhad* (Mashhad).

Fainstein, S. S., & Servon, L. J. (2005) *Gender and Planning: A Reader*, 1st ed. (New Jersey: Rutgers University Press).

Frank, A. I., Mironowicz, I., Lourenço, J., Franchini, T., Ache, P., Finka, M., Scholl, B., & Grams, A. (2014) Educating planners in Europe: A review of 21st century study programmes, *Progress in Planning*, 91, pp. 30–94. doi:10.1016/j.progress.2013.05.001.

Friedmann, J. (1996) The core curriculum in planning revisited, *Journal of Planning Education and Research*, 15(2), pp. 89–104. doi:10.1177/0739456X9601500202.

Garcia-Ramon, M. D., & Ortiz, A. (2009) Teaching and research on gender in Spanish geography, in: A. S. Lada (Ed) *Teaching Gender, Diversity and Urban Space: An International Approach Between Gender Studies and Spatial Disciplines*, pp. 53–77 (Utrecht/Stockholm: Utrecht University and Stockholm University).

Gohari, S. (2023) Shaping awareness about planning by helping planners to become more mindful and critical about their identity, role, and context, in: S. K. Diko, L. M. Hollstein, & D. Palazzo (Eds) *Routledge Companion to Professional Awareness and Diversity in Planning Education*, pp. 213–223 (New York: Routledge).

Greenlee, A. J., Jackson, A., Garcia-Zambrana, I., Lee, C. A., & Chrisinger, B. (2018) Where are we going? Where have we been?: The climate for diversity within urban planning educational programs, *Journal of Planning Education and Research*, 42(3), pp. 331–349. doi:10.1177/0739456X18815740.

Haselton, M. G., Nettle, D., & Andrews, P. W. (2005) The evolution of cognitive bias, in: D. M. Buss (Ed) *The Handbook of Evolutionary Psychology*, pp. 724–746 (New Jersey: Wiley).

Hayden, D. (1980) What would a non-sexist city be like? Speculations on housing, urban design, and human work, *Signs Journal of Women in Culture and Society*, 5(S3), pp. S170–187. doi:10.1086/495718.

Healey, P. (1997) *Collaborative Planning: Shaping Places in Fragmented Societies* (Vancouver: UBC Press).

Hollsetein, L. M., Diko, S. K., & Palazzo, P. (2023) BECOMING ACTIVATED: Professional awareness through the activate community empowerment outreach program, in: S. K. Diko, L. M. Hollstein, & D. Palazzo (Eds) *Routledge Companion to Professional Awareness and Diversity in Planning Education*, pp. 101–116 (New York: Routledge).

Jackson, A., Garcia-Zambrana, I., Greenlee, A. J., Lee, C. A., & Chrisinger, B. (2018) All talk no walk: Student perceptions on integration of diversity and practice in planning programs, *Planning Practice & Research*, 33(5), pp. 574–595. doi:10.1080/02697459.2018.1548207.

Larsson, A. (2006) From equal opportunities to gender awareness in strategic spatial planning, *Town Planning Review*, 77(5), pp. 507–530. doi:10.3828/tpr.77.5.2.

Lemaire, X., & Kerr, D. (2017) *Gender and Inclusive Urbanization* (London: UCL Energy Institute/ SAMSET).

Looye, J. W., & Sesay, A. (1998) Introducing diversity into the planning curriculum: A method for department-wide implementation, *Journal of Planning Education and Research*, 18(2), pp. 161–170. doi:10.1177/0739456X9801800208.

MacGregor, S. (1996) Deconstructing the man made city: Feminist critiques of planning thought and action, in: M. Eichler (Ed) *Changes of Plans: Towards a Non-Sexist Sustainable City*, pp. 25–49 (Toronto: University of Toronto Press).

Manaugh, K., Badami, M. G., & El Geneidi, A. M. (2015) Integrating social equity into urban transportation planning: A critical evaluation of equity objectives and measures in transportation plans in North America, *Transport Policy*, 37, pp. 167–176. doi:10.1016/j.tranpol.2014.09.013.

Maroufi, H., Ghalandarian, I., & Hashemi, N. (2021) *Report on the Revision of Urban Planning Curriculum at Undergraduate Level* (Mashhad: Ferdowsi University of Mashhad, Educational Planning and Academic Development Office).

Moser, C. O. N. (1989) Gender planning in the third world: Meeting practical and strategic gender needs, *World Development*, 17(11), pp. 1799–1825. doi:10.1016/0305-750X(89)90201-5.

Pahlavan, P., & Maroufi, H. (2023) Diversifying urban planning and architecture programs through international education experience: Lessons from Ferdowsi university of Mashhad, Iran, in: S. K. Diko, L. M. Hollstein, & D. Palazzo (Eds) *Routledge Companion to Professional Awareness and Diversity in Planning Education*, pp. 65–74 (New York: Routledge).

Palazzo, D., Hollstein, L., & Diko, S. K. (2021) Urban planning as a career preference for students: Efforts to improve awareness about the profession, *Planning Practice & Research*, 36(2), pp. 174–192. doi:10.1080/02697459.2020.1782056.

Parra-Martínez, J., Gutiérrez-Mozo, M. E., & Gilsanz-Díaz, A. (2021) Inclusive higher education and the built environment. A research and teaching agenda for gender mainstreaming in architecture studies, *Sustainability*, 13(5), pp. 2565. doi:10.3390/su13052565.

Poxon, J. (2001) Shaping the planning profession of the future: The role of planning education, *Environment and Planning B: Planning and Design*, 28(4), pp. 563–579. doi:10.1068/b2735.

Rakodi, C. (1991) Cities and people: Towards a gender-aware urban planning process? *Public Administration and Development*, 11(6), pp. 541–559. doi:10.1002/pad.4230110603.

Reeves, D. (2014) Putting women and gender in the frame- A consideration of gender in the global report on human settlement planning sustainable cities 2009, *Habitat International*, 43:293–298. doi:10.1016/j.habitatint.2014.04.003.

Reeves, D. (2019) Gender, in: N. G. Leigh, S. T. French, S. Guhathakurta, & B. Stiftel (Eds) *The Routledge Handbook of International Planning Education*, pp. 100–114 (New York: Routledge).

Rezai-Rashti, G. M., & Moghadam, V. M. (2011) Women and higher education in Iran: What are the implications for employment and the "marriage market"?, *International Review of Education*, 57(3/4), pp. 419–441. doi:10.1007/s11159-011-9217-9.

Sandercock, L. (Eds) (1998a) *Making the Invisible Visible: A Multicultural Planning History* (Berkley: University of California Press).

Sandercock, L. (1998b) *Towards Cosmopolis: Planning for Multicultural Cities* (Chichester: Wiley).

Sandercock, L., & Forsyth, A. (1992) A gender agenda: New directions for planning theory, *Journal of the American Planning Association*, 58(1), pp. 49–59. doi:10.1080/01944369208975534.

Sen, S., Umemoto, K., Koh, A., & Zambonelli, V. (2017) Diversity and social justice in planning education: A synthesis of topics, pedagogical approaches, and educational goals in planning syllabi, *Journal of Planning Education and Research*, 37(3), pp. 347–358. doi:10.1177/0739456X16657393.

Shroff, R. H., Ting, F. S. T., Lam, W. H., Cecot, T., Yang, J., & Chan, L. K. (2021) Conceptualization, development and validation of an instrument to measure learners' perceptions of their active learning strategies within an active learning context, *International Journal of Education Methodology*, 7(1), pp. 201–223. doi:10.12973/ijem.7.1.201.

Statistical Center of Iran (SCI) (1982) *Statistic Year Book of 1360* (Tehran: Statistical Center of Iran).

Sweet, E. L. (2006) Spy or feminist: "Grrrila" research on the margin, *Gender and the Local-Global Nexus: Theory, Research, and Action*, 10, pp. 45–61.

Sweet, E. L., & Etienne, H. F. (2011) Commentary: Diversity in urban planning education and practice, *Journal of Planning Education and Research*, 31(3), pp. 332–339. doi:10.1177/0739456X11414715.

Synder, M. G. (1995) Feminist theory and planning theory: Lessons from feminist epistemologies, *Berkeley Planning Journal*, 10(1), pp. 91–106. doi:10.5070/BP310113063.

Tacoli, C. (2013) The benefits and constraints of urbanization for gender equality, *Environment and Urbanization Briefs*, 25(1), pp. 1–6. doi:10.1177/0956247813479086.

Terraza, H., Orlando, M., Lakovits, C., Janik, V., & Kalashyan, A. (2020) *Handbook for Gender-Inclusive Urban Planning and Design* (Washington, DC: The World Bank Group).

Thomas, J. M. (1996) Educating planners: Unified diversity for social action, *Journal of Planning Education and Research*, 15(3), pp. 171–182. doi:10.1177/0739456X9601500302.

United Nations (2015) *Transforming Our World: The 2030 Agenda for Sustainable Development* (New York: United Nations, Department of Economic and Social Affairs).

United Nations Human Settlements Programme (2012) *Gender Issue Guide: Urban Planning and Design* (Nairobi: UN-Habitat).

United Nations Human Settlements Programme (2015) *Gender Issue Guide: Gender Responsive Urban Legislation, Land and Governance* (Nairobi: UN-Habitat).

United Nations Population Fund (UNPF) (2007) *State of the World Population 2007: Unleashing the Potential of Urban Growth* (Geneva: UNFPA). https://www.unfpa.org/publications/state-world-population-2007

Van Hoven, B., Been, W., Fortuijn, J. D., & Mamadoub, V. (2009) Bringing in feminist pedagogy through student-led fieldtrips: A report from the Netherlands, in: A. S. Lada Ed *Teaching Gender, Diversity and Urban Space: An International Approach Between Gender Studies and Spatial Disciplines*, pp. 53–77 (Utrecht/Stockholm: Utrecht University and Stockholm University).

Van Karnenbeek, L., Janssen-Jansen, L., & Peel, D. (2022) Conceptualising co-creative planning pedagogies: The community knowledge triangle, *Planning Practice & Research*, 37(4), pp. 446–463. doi:10.1080/02697459.2020.1856501.