

AT A CROSSROADS: FIGHT-OR-FLIGHT FOR WOMEN INTERIOR DESIGNERS IN CONSTRUCTION

N. Shaharudin¹, N. M. A. Noorhani^{*2}, A. A. Mustapha², F. N. K. Anuar³ and N. K. F. Mustafa⁴

¹ Centre of Postgraduate Studies, College of Built Environment, Universiti Teknologi MARA Shah Alam, 40450 Shah Alam, Selangor, Malaysia.

² Centre of Studies for Interior Architecture, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, Kampus Puncak Alam, 42300 Bandar Puncak Alam, Selangor, Malaysia.

³ Department of Building Surveying, Faculty of Built Environment, Universiti Malaya, 50603 Kuala Lumpur, Malaysia.

⁴ Department of Quantity Surveying, Faculty of Architecture and Built Environment, Infrastructure University Kuala Lumpur, 43000 Kajang, Selangor, Malaysia.

**corresponding: nmaizura@uitm.edu.my*

Article history:

Received Date:

24 December
2024

Revised Date: 1

May 2025

Accepted Date:

1 June 2025

Abstract— This study investigates the challenges experienced by women in the male-dominated construction sector, focusing on the interior design field. While female participation in various professional fields is rising, there remains a notable gap in research addressing the unique barriers that female interior designers face. These barriers include navigating gender

Keywords: Interior Design, Women as Interior Designers, Women in Construction Industry, Barriers and Challenges, Gender Discrimination	discrimination, confronting negative societal perceptions, limited project management skills and knowledge, difficulty achieving work-life balance, restricted career growth opportunities, lack of mentorship and unsupportive working environments. This qualitative research utilizes a survey with open-ended questions as its primary instrument, targeting 150 female interior designers randomly selected from the Malaysian Institute of Interior Designers (MIID) membership list. Data were analysed through thematic content analysis to identify key themes and patterns. Out of the 150 participants, only 113 completed the survey with 94 respondents acknowledging experiences of gender bias, underscoring women's underrepresentation in this sector. The most critical challenge identified was the limited project management skills and knowledge, which not only restricts career advancement but also intensifies the struggle for women to assert their roles in the industry. Findings from this study emphasize the urgent need for targeted initiatives to develop these skills and promotes a more inclusive environment for female interior designers within the construction industry.
---	--

I. Introduction

The construction industry, traditionally dominated by men, has gradually seen more women enter the field, particularly in areas like interior design. Despite this progress, women in this sector still face significant challenges due to their underrepresentation. Across disciplines within construction, women have historically been underrepresented, a trend documented over decades [1-8]. This disparity is especially evident in leadership and project management roles, where systemic barriers often restrict women's opportunities [9, 10]. For female interior designers, the challenges are further compounded by gender bias, societal perceptions and limited access to essential project management skills and knowledge [11, 12].

These issues create a pivotal moment or "point of departure" in many women's careers, where they must choose to either confront these challenges ("fight") or consider leaving the field ("flight"). This study aims to explore these critical

decision-making junctures, focusing on how women navigate these barriers within the construction industry. The objective is to deepen understanding of their professional experiences, particularly in interior design, and highlight the ongoing underrepresentation of women in the field.

The study addresses key questions, including: "*How do women navigate gender bias in their professional settings?*" This question seeks to uncover specific forms of bias, especially in areas such as promotions, project assignments and leadership roles. Additionally, "*What obstacles do women face as a result of gender bias?*" This research examines the effects of bias on confidence, access to mentorship and career visibility. Further questions address: "*How gender bias impacts broader aspects of women's careers, including pay equity, job satisfaction, mental health and retention in the industry?*" These questions design to clarify the implications of gender inequality in interior design and

the wider construction field. By examining these dimensions, the research highlights the systemic barriers that limit women's full participation and career growth in these industries and suggests strategies for creating a more inclusive workplace.

This focus is driven by the recognition that systemic gender biases affect women's career growth and job satisfaction. The study objectives break down this exploration into key areas, including identifying specific challenges, understanding coping strategies and assessing the overall impact on women's professional lives. The findings will provide insights into mechanisms of gender bias and offer recommendations for fostering a more equitable environment for female interior designers.

II. Literature Review

This literature review aims to provide a comprehensive understanding of the challenges faced by female interior designers within the construction industry. By analysing existing studies, the

review highlights key themes such as gender bias, societal perceptions, and barriers to professional development that hinder women's progress in this field.

A. Overview of Gender Bias in the Construction Industry

The construction industry, traditionally male-dominated and physically demanding, presents significant barriers for women, including hazardous work environments and rough workplace communication. While there has been a gradual increase in female participation, especially in recent decades, the industry remains largely male-dominated. A study noted a rise in women's involvement in construction, but societal perceptions, such as the view that women are less suited for physically demanding roles, continue to undermine their contributions [8].

In Malaysia, women's participation in the workforce grew from 44.7% in 1995 to 55.4% in 2013, with factors like competitive salaries, job security,

and position prestige contributing to this trend [13, 14]. However, the Department of Statistics Malaysia highlights a significant gender gap in the construction industry, with women making up only 24.2% of the workforce, fuelling ongoing debates about gender-related issues [15]. Despite increased interest in “women in construction”, female participation lags behind other sectors like manufacturing, administration, and academia, particularly in senior roles such as architecture and engineering.

Barriers such as work-life balance, a “macho” culture, limited networks, and few promotion opportunities hinder women’s advancement in construction. Many women are relegated to administrative roles, and leadership positions remain predominantly male. Strategies to improve gender inclusivity include gender-specific policies, flexible working arrangements, and efforts to improve the industry’s image. There is a call for cultural and structural changes within the Malaysian construction sector to create a

more inclusive and equitable environment for women.

B. Gender Bias in the Interior Design Profession

Interior design is a vital branch of the construction industry, requiring not only design expertise but also strong project management skills [16]. While the profession is often seen as more gender-inclusive compared to fields like engineering or construction management, gender bias remains a significant issue. In Malaysia, the Malaysian Institute of Interior Designers (MIID) reports that about 61% of its members are male, predominantly in leadership roles, reflecting the continued male dominance in the field [17]. Despite the growing presence of female interior designers, gender disparities persist, with many women facing challenges in career advancement, leadership roles, and recognition.

Historical studies highlight the struggles women faced in securing professional recognition and leadership positions within the field due to

societal biases [18]. It has been further explored how gender, race, and class biases have limited diversity and inclusion in interior design, with women's work often undervalued compared to their male counterparts [19]. The study advocates for intersectional approaches to reform interior design education and professional practices to foster a more inclusive and equitable profession.

C. Barriers to Women's Participation in the Construction Industry

The literature review examines seven key barriers that contribute to women's underrepresentation in the construction industry: lack of project management knowledge and skills, negative societal perceptions, gender discrimination, limited career growth opportunities, poor work-life balance, absence of mentorship and role models and an uncondusive working environment. These barriers significantly impact women's participation and advancement

in the sector, and the review explores potential strategies for overcoming these challenges.

One of the most prominent barriers is the lack of project management skills and knowledge among women in construction, often resulting from limited access to training and professional development compared to male counterparts [20, 21]. Without these essential competencies, women are less likely to be considered for leadership or project management roles, perpetuating gender disparities in the field [22].

Another significant barrier is the negative societal perception of women in construction, where traditional gender roles often dictate what is seen as "appropriate" work for women. Construction is perceived as a field requiring physical strength and technical prowess, qualities traditionally attributed to men. This view frequently leads to biased hiring practices and limited opportunities for women [11]. Cultural norms and media representations that rarely feature women in construction

roles further reinforce these perceptions, making it difficult for women to gain acceptance and recognition in the industry [23, 24].

Gender discrimination remains pervasive within the construction sector, manifesting in both overt and subtle ways. Women often encounter discriminatory practices that hinder access to job opportunities, equitable pay and career advancement [25]. Discrimination also surfaces in everyday interactions with male colleagues, where women may face exclusionary behavior, sexist remarks or undermining of their professional skills [26, 27]. Such experiences contribute to a hostile work environment, discouraging women from staying in the field and impeding their career progression.

Limited career growth opportunities also present a major challenge for women in construction. Studies show that women are less likely to be promoted or given advancement opportunities, partly due to biases that favor men for leadership roles [28]. This issue

is further compounded by a lack of female role models in senior positions, which can diminish the career aspirations of women in the industry [29, 30]. Consequently, many women become “stuck” in lower-level positions, facing significant obstacles in breaking through the industry’s glass ceiling.

The demanding nature of construction work, characterized by long hours and inflexible schedules, leads to poor work-life balance that disproportionately impacts women, especially those with family responsibilities. Construction roles often demand constant availability, which makes balancing professional and personal lives challenging [31, 32]. For women who are primary caregivers, this lack of flexibility often forces difficult choices between career and family, contributing to higher attrition rates among women [33].

The absence of mentorship and role models further exacerbates these challenges. Mentorship plays a crucial role in career advancement, offering guidance,

support and networking opportunities that are essential for professional growth. However, in the construction industry, the scarcity of female mentors and role models means that women often lack the support needed to navigate their careers successfully [34, 35]. This gap isolates women and reinforces the perception that construction is an unsuitable career for them, limiting the industry's ability to attract and retain female talent [12].

Lastly, an uncondusive working environment remains a substantial barrier. Construction workplaces often lack inclusivity and are not designed to meet the needs of female employees [36]. This can include inadequate facilities, a culture that tolerates sexist behavior and a lack of accommodations for women [21, 37]. Such conditions increase stress and dissatisfaction among women, hindering their ability to succeed and thrive in the industry.

In conclusion, these barriers not only limit women's participation in the construction

field but also contribute to a continued gender imbalance in the industry.

III. Research Methodology

This study employs a qualitative research methodology to explore the experiences of female interior designers in the construction industry, with a particular emphasis on gender bias. Qualitative research is well-suited for this investigation as it allows for an in-depth understanding of social dynamics and personal experiences [38]. Following this, qualitative research is especially effective in examining how individuals interpret their experiences and assign meaning to their surroundings [39]. This approach is ideal for uncovering the complex and multifaceted challenges that women encounter in the construction sector, which has traditionally been male dominated.

A. Research Process and Techniques

The research process began with a comprehensive literature

review to identify key themes related to gender bias in both the construction and interior design sectors. This review provided a foundation for developing the survey instrument, ensuring it captured the relevant issues and challenges faced by female interior designers. The primary method of data collection was a survey featuring open-ended questions, allowing participants to provide in-depth, nuanced responses that offered rich data for analysis [7, 24]. The survey was specifically designed to gather insights into the personal and professional obstacles women encounter, with a particular focus on gender bias and gaps in project management skills and knowledge.

B. Research Instruments

The primary instrument was a survey structured into two sections namely demographics and perspectives on women in construction. The demographics section gathered information on age, designation and years of experience, while the second section delved into respondents' views on gender-related

challenges. Distributed via email in January 2024, the survey provided respondents with a four-week response timeline, enhancing accessibility and convenience. This survey targeted female interior designers across various roles, including project directors, managers, designers and both senior and junior designers in the private sectors. The open-ended questions encouraged in-depth responses, facilitating the capture of nuanced insights that closed-ended questions may miss [40]. This approach aligns with [39], emphasizing on the flexibility of qualitative instruments, essential for exploring complex human experiences.

C. Sampling Methodology

Purposive sampling was used to select participants, focusing on female interior designers affiliated with the Malaysian Institute of Interior Designers (MIID). Out of an initial selection of 150 participants, 113 provided complete responses, with 7 providing partial answers and 30 not

responding, resulting in a final response rate of approximately 75%. [39] supports purposive sampling in qualitative research when aiming to obtain information-rich cases, as it allows researchers to hone in on individuals with characteristics relevant to the study's objectives. [40] similarly advocated for purposive sampling when specific population traits align with research goals.

D. Data Analysis

Post-data collection, thematic analysis was employed to interpret responses. Thematic Analysis is a robust method for identifying, analyzing and reporting patterns (themes) within qualitative data [41]. This technique was chosen for its systematic approach to coding data, allowing for meaningful insights into participants' responses.

IV. Results and Discussion

The data findings and analysis section present an overview of the survey results, addressing

the research objectives by examining respondents' backgrounds and their experiences with gender bias in the interior design sector. The initial survey questions collected demographic data, including age, designation and years of work experience, to establish a foundational understanding of the participants' profiles.

Table 1 summarizes the distribution of these demographic variables, offering insights into the diversity of respondents in terms of job roles, seniority and length of service in the field. Notably, 94 out of the 113 respondents reported experiencing gender bias in their professional lives, highlighting the widespread nature of gender disparity within the interior design profession. In contrast, 19 respondents indicated that they had not encountered gender bias, providing a different perspective on workplace dynamics.

Table 1: Summary Distribution of 94 Respondents by Roles at the Workplace

Positions	Respondents	Percentage (%)
Project Director	19	20
Project Designer	14	15
Project Manager	15	16
Senior Designer	15	16
Junior Designer	31	33

The primary focus of the analysis centres on the responses of the 94 individuals who reported experiencing gender bias, as their experiences are crucial for understanding the barriers women face in the industry. The roles are categorized into five distinct positions namely Project Director, Project Designer, Project Manager, Senior Designer, and Junior Designer. Notably, Junior Designers form the largest group, accounting for 35 respondents (31%), suggesting that the study captures experiences from individuals in the early stages of their careers, who may be particularly affected by foundational challenges related to gender bias in the construction industry.

On the other hand, both Project Directors and Project Managers are represented by 21

respondents (18.5%) each, reflecting a solid presence in higher-level roles. Senior Designers, with 20 respondents (18%), are similarly represented, while Project Designers, making up the smallest group with 16 respondents (14%), may reflect either a more limited sample or fewer people occupying this role within the industry.

This distribution provides a comprehensive picture of how gender bias may be experienced across different levels of seniority in the interior design profession. The varied representation of job roles ensures a nuanced analysis of how gender dynamics evolve as individuals progress through their careers.

The data in Table 2 highlights several critical barriers that hinder the professional growth and well-being of women in interior design and the broader

V. Conclusion

In conclusion, despite the perception that interior design is more gender-balanced than other areas of construction, women still face significant challenges. They are often stereotyped as being more suited to creative roles rather than management, with assumptions about their lack of leadership or technical skills, which restricts their career growth and reinforces the glass ceiling in leadership positions. While interior design is considered more gender-neutral, societal perceptions still favor men in leadership roles, with women frequently overlooked for promotions and leadership opportunities.

Gender discrimination continues to affect hiring, promotions and client interactions, particularly for women in senior roles, who often feel the need to prove their competence more than their male counterparts. Furthermore, unsupportive work environments and high-stress conditions contribute to burnout, limiting women's ability to advance, much like the

challenges faced by women in the broader construction industry.

VI. Acknowledgement

The authors gratefully acknowledge all the respondents for their time contributions.

VII. References

- [1] A. Dainty, S. Green, and B. Bagilhole, Eds., *People and Culture in Construction: A Reader*, Routledge, 2007.
- [2] A. N. Ghanbaripour, R. J. Tumpa, R. Y. Sunindijo, W. Zhang, P. Yousefian, R. N. Camozzi, C. Hon, N. Talebian, T. Liu and M. Hemmati, "Retention over attraction: A review of women's experiences in the Australian construction industry; challenges and solutions", *Buildings*, vol. 13, no. 2, pp. 490, 2023.
- [3] A. K. Lewis and Y. Shan, "Influencing factors on recruitment and retention of women in construction education: A literature review", in *Construction research congress 2020*, pp. 717-725, 2020.
- [4] C. Norberg and M. Johansson, "Women and 'ideal' women: The representation of women in the construction industry", *Gender Issues*, vol. 38, pp. 1-24, 2021.
- [5] J. D. Owolabi, K. E. Ogundipe, B. F. Ogunbayo and C. O. Aigbavboa, "Barriers to attracting

- and retaining female construction graduates into academic careers in higher education institutions”, *Buildings*, vol. 13, no. 10, pp. 2673, 2023.
- [6] A. Perrenoud, B. F. Bigelow and E. Perkins, “Advancing women in construction: Gender differences in attraction and retention factors with managers in the electrical construction industry”, *Journal of Management in Engineering*, vol. 36, no. 5, pp. 04020043, 2020.
- [7] J. C. Turpin, “Omitted, devalued, ignored: Reevaluating the historical interpretation of women in the interior design profession”, *Journal of Interior Design*, vol. 27, no. 1, pp. 1-11, 2001.
- [8] S. Vijayaragunathan and T. Rasanthi, “An insight to women in construction for fostering female careers in Sri Lankan construction industry”, *Journal of international women’s studies*, vol. 20, no. 3, pp. 168-173, 2019.
- [9] U. Salamah and L. Widaningsih, “The obstacles and challenges of women workers in the construction industry”, *Teknologi dan Kejuruan: Jurnal Teknologi, Kejuruan, dan Pengajarannya*, vol. 45, pp. 161-167, 2022.
- [10] K. Sang and A. Powell, “Gender inequality in the construction industry: Lessons from Pierre Bourdieu”, in 28th Annual ARCOM Conference, Edinburgh, United Kingdom, pp. 237-247, 2012.
- [11] S. L. Fielden, M. J. Davidson, A. W. Gale and C. L. Davey, “Women in construction: The untapped resource”, *Construction Management & Economics*, vol. 18, no. 1, pp. 113-121, 2000.
- [12] C. Greed, “Women in the construction professions: Achieving critical mass”, *Gender, Work & Organization*, vol. 7, no. 3, pp. 181-196, 2000.
- [13] K. F. Anuar, D. S. S. P. Haji Abas, A. Ibrahim and A. I. Nor Hamzah, “The barriers and challenges of women’s involvement in the construction industry within Klang Valley area”, *International Journal of Industrial Management*, vol. 3, pp. 61-75, 2017.
- [14] A. M. Kamaruddeen, K. N. Khalid and W. Wahi, “Factors influencing females’ work in the construction companies”, *e-Bangi: Journal of Social Science and Humanities*, vol. 16, pp. 1-9, 2019.
- [15] Department of Statistics Malaysia, “Statistics on Women Empowerment in Selected Domains, 154”, Department of Statistics Malaysia, 2023.
- [16] A. A. Mustapha, M. F. Mohammad, N. M. A. Noorhani and Z. Zainal Abidin, “Establishment the scope of work for interior designers”, *Procedia-Social and Behavioral Sciences*, vol. 105, 875-884, 2013.
- [17] Malaysian Institute of Interior Design, MIID, 1989. [Online]. Available: <https://miid.org.my>.
- [18] J. Turpin, “The history of women

- in interior design: A review of literature", *Journal of Interior Design*, vol. 33, no. 1, pp. 1-16, 2007.
- [19] O. Vallerand, "Uncovering structures: Making visible hidden biases," *J. Interior Des.*, vol. 49, no. 1, pp. 3-7, 2024.
- [20] A. Powell and K. J. Sang, "Equality, diversity, and inclusion in the construction industry", *Construction Management and Economics*, vol. 31, no. 8, pp. 795-801, 2013.
- [21] L. Worrall, K. Harris, R. Stewart, A. Thomas and P. McDermott, "Barriers to women in the UK construction industry", *Engineering, Construction and Architectural Management*, vol. 17, no. 3, pp. 268-281, 2010.
- [22] S. Cartwright and A. W. Gale, "Project management: Different gender, different culture?", *Leadership & Organization Development Journal*, vol. 16, no. 4, pp. 12-16, 1995.
- [23] D. Amaratunga, R. Haigh, M. Shanmugam, A. Lee and G. Elvitigala, "Construction industry and women: A review of the barriers", in 3rd international SCRI research symposium, 2006.
- [24] G. Miller and R. Hayward, "New jobs, old occupational stereotypes: Gender and jobs in the new economy", *Journal of Education and Work*, vol. 19, no. 1, pp. 67-93, 2006.
- [25] J. H. Watts, "Allowed into a man's world: Meanings of work-life balance: Perspectives of women civil engineers as 'minority' workers in construction", *Gender, Work & Organ*, vol. 16, no. 1, pp. 37-57, 2009.
- [26] L. Clarke, E. F. Pedersen, E. Michielsens and B. Susman, "The European Construction Social Partners: Gender Equality in Theory and Practice", *European Journal of Industrial Relations*, vol. 11, no. 2, pp. 151-177, 2005.
- [27] A. W. Gale, "Women in Non-traditional Occupations: The Construction Industry", *Women in Management Review*, vol. 9, no. 2, pp. 3-14, 1994.
- [28] A. R. J. Dainty, R. H. Neale and B. M. Bagilhole, "Comparison of men's and women's careers in UK construction", *Journal of Professional Issues in Engineering Education and Practice*, vol. 126, no. 3, pp. 110-115, 2000.
- [29] C. L. Menches and D. M. Abraham, "Women in construction—Tapping the untapped resource to meet future demands," *J. Constr. Eng. Manag.*, vol. 133, no. 9, pp. 701-707, 2007.
- [30] K. Moore, "Empowerment at last?" Women in the UK construction industry", *Journal of International Development*, vol. 13, no. 3, pp. 321-329, 2001.
- [31] N. Galea, A. Powell, M. Loosemore and L. Chappell, "Designing robust and revisable policies for gender equality: Lessons from the Australian construction industry",

- Construction Management and Economics*, vol. 33, no. 5-6, pp. 375-389, 2015.
- [32] H. Lingard and V. Francis, "The work-life experiences of office and site-based employees in the Australian construction industry", *Construction Management and Economics*, vol. 22, no. 9, pp. 991-1002, 2004.
- [33] H. Lingard and V. Francis, "The decline of the 'traditional' family: Work-life benefits as a means of promoting a diverse workforce in the construction industry of Australia", *Construction Management and Economics*, vol. 23, no. 10, pp. 1045-1057, 2005.
- [34] A. O. Afolabi, FT. Akinbo and A. Akinola, "Improving career development through a women mentoring program in the construction industry", *Journal of Physics: Conference Series*, vol. 1378, p. 042031, 2019.
- [35] K. J. C. Sang, A. R. J. Dainty and S. G. Ison, "Gender: A risk factor for occupational stress in the architectural profession?", *Construction Management and Economics*, vol. 25, no. 12, pp. 1305-1317, 2007.
- [36] M. Loosemore and T. Waters, "Gender differences in occupational stress among professionals in the construction industry", *Journal of Management in Engineering*, vol. 20, no. 3, pp. 126-132, 2004.
- [37] A. W. Gale and M. Skitmore, "Women in the Construction Industry - A Discussion on the Findings of the Two Recent Studies of the Construction Industry Sector", *Building Economics and Construction Management: Management of the Building Firm*, 1990.
- [38] J. W. Creswell, *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*, 3rd ed., Sage Publications, 2008.
- [39] S. B. Merriam, *Qualitative research: A guide to design and implementation*, Jossey-Bass, 2009.
- [40] J. W. Creswell, *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, 3rd ed., Sage Publications, 2013.
- [41] V. Braun, and V. Clarke, "Using thematic analysis in psychology", *Qualitative Research in Psychology*, vol. 3, no. 2, pp. 77-101, 2006.