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May 16-17, 2022, Istanbul



Editors

Agit Ferhat OZEL

Gamze TURUN

Handan TANYILDIZI KOKKULUNK

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**REVIEWING BARRIERS TOWARDS WOMEN PROFESSIONAL PARTICIPATION IN THE
NIGERIA BUILT ENVIRONMENT INDUSTRY**

**Abubakar Aysha SULAYMAN
Rasheed Babatunde ISA
Abdulkabir Opeyemi BELLO**

ABSTRACT

Transforming a natural environment into a built environment involves the efforts of both genders—males and females. Gender diversity participation in developing a built environment has become a subject of debate because the built environment profession has been seen as a male-dominated profession. Thereby assumed to be challenging for women with unprecedented negativity. In most cases in the built environment industry, sexist behaviour towards female colleagues appears to have become normalised and institutionalised discrimination, which are critical barriers to the participation of women in the built environment industry, thereby limiting women's participation in the industry. Hence, this study explores the barriers to women's participation in the Nigerian built environment industry to establish a better understanding of the most critical barriers and suggest mitigating measures to the barriers. The study adopted a review of related literature methodology to carry out the study. The study's findings reveal that sexist attitudes and perceptions, perceived stress, long working hours, family and work-life balance, and negative perception of women's capabilities are the most crucial barriers to women's participation in the built environment industry. In conclusion, the study suggests that women's participation should be encouraged from the grassroots level, increase awareness, and encourage gender diversity and policies by both government and professional bodies to protect women's rights in built environment industry. The outcome of this study contributes to the existing knowledge. It has also established the current barriers women face in participating in the industry and suggested ways to mitigate the barriers.

Keywords: Barriers, Built environment, Nigeria, Participation, Professional, Women.

INTRODUCTION

Gender has always played a significant impact in society as well as career decisions. Gender influences profession choice, according to Madikizela and Haupt (2010) and Akinlolu and Haupt (2019), and particular industries are dominated by a specific gender. The Social Cognitive Career Theory (SCCT) model of career choice projected that gender and socio-economic factor have a positive effect on the career behaviour of women and girls. Akinlolu and Haupt (2020) proposed a conceptual model that broadens the model of career option by obtaining constraints to the engagement of women in the construction profession. Because of men's abilities to do various construction-related activities, their aspirations, and their expectations of the consequences of engaging in these activities, the model argues that career choices in the built environment business are regarded to be men's careers. Professional choices are influenced in many situations by societal restrictions and supports received by an individual, as well as the individual's assessment of the likelihood of success of certain career possibilities, according to a prediction made in 1987. (Eccles, 1987; Madikizela and Haupt, 2010; Akinlolu and Haupt, 2019; Akinlolu and Haupt, 2020). Individuals may perceive a number of difficulties or impediments to pursuing a profession in construction (Madikizela and Haupt, 2010; Male and MacNish, 2015). Discriminatory attitudes, work-life conflict, wage disparities, workplace culture, lack of access to opportunities, barriers to career advancement, poor working conditions, long work hours, the glass ceiling, gender stereotypes, a lack of knowledge and career information, a lack of role models, sexual harassment, a lack of education and training, and a lack of opportunities are some of these barriers (Male and MacNish, 2015; Akinlolu and Haupt, 2020).

From a women's career choice perspective, the Akinlolu and Haupt (2020) model tries to link contextual factors such as barriers such as work-life conflict, sexual harassment, the glass ceiling, and the gender wage gap, opportunity structures, support structures, socialization process, gender role stereotypes, gender and socioeconomic status. Opportunity structures, according to Lent et al. (1994 and 2003), tend to enhance or restrict mandatory control in job choice behaviour. Although a person behaves as a free agent in choosing

a career path, circumstances and external pressures may limit personal job choices, according to career development and choice theories (Lent et al., 2003; Akinlolu and Haupt, 2020). While the suggested conceptual model allows for the exercise of human agency, it also emphasizes the elements that limit, enhance, or invalidate personal responsibility in the career decision-making process. Differential challenges experienced by men and women, as well as women from various socioeconomic backgrounds, in the career, choosing process, which is thought to be influenced by socialization and learning experiences, have been emphasized in a number of studies (Charity-Leeke, 2012; Saifuddin et al., 2013).

Women's status in any community has a significant impact on the country's overall development. Women have played an important part in all sectors of the economy, therefore their development is a global priority in this new millennium (Islam and Sultana, 2006).

There are three groups of women categorization that work in the construction industry:

- Women in technical professions such as architecture and engineering;
- Women in administrative jobs such as Human Resources, Budget and Finance, and so on.
- On-site construction labour/workforce: women

Between industrialized and developing countries, the distribution of women in the workforce falls into one of these three categories. In the United Kingdom, for example, 84 percent of women in construction work as secretaries, with only 10% working as professionals and the other 6% working as craft and trade level workers on the job site (Amaratunga et al., 2006). In India, however, women construction workers account for 25% of the construction workforce. Only 0.12 million women, or 1.4 percent, of the 32.6 million construction employees are engineers, architects, designers, and administrators (Chittibabu, 2007). The rest are construction labourers. As a result, in India, studies are predominantly focused on the significant number of women in the third group (Ahuja and Kumari, 2012).

As previously said, women in the built environment are divided into three categories. In some ways, the three categories are similar, but in others, they are very distinct. The issues or challenges that women in the built environment face are divided into three categories (Ahuja and Kumari, 2012). Women in the first group can enter the construction sector after completing their school, but they have a hard time staying in it. The construction sector entails lengthy working hours and needs employees to go to building sites regularly. Women employees found it difficult to maintain this schedule after a few years of work owing to family obligations. However, the nature of this profession does not foster the flexible working hours that women may require in the future. In addition, they are unable to work from home in a virtual working environment because the construction industry has been sluggish to adopt IT tools and procedures, and available and frequently freely accessible technology is not being fully leveraged in comparison to other sectors.

Staff in the construction business may attend institutional training programs to improve their skill levels and keep up with evolving technologies, but this knowledge must be supplemented with on-the-job experience. It may be difficult for women to travel to certain areas to participate in such training programs. As a result, re-absorption into the sector, particularly at senior levels, becomes even more challenging following the sabbatical period, as women fall behind in on-the-job skill up-gradation during this time. Women in senior roles are common in industries such as IT, retail, pharmaceuticals, and banking, but women in senior positions in construction enterprises are rare, with the exception of a few architects and designers.

For the women in the second group, the situation is less dire because they are not compelled to travel to construction sites and may have the option of working in flexible hours. In India, both the urban and rural populations are impoverished, and unmarried and poor women who must support their children require a regular source of income. Because there is a seasonal demand for labour in the agriculture industry, the bulk of these women are obliged to work on construction projects. Women from impoverished and depressed castes, such as Schedule caste or Backward Caste, have also been claimed to be pushed into construction labour in order to make a living (Madhok, 2005 as quoted in Barnabas et al., 2009). These women constitute the third group.

Despite the fact that women are recruited in semi-skilled and skilled occupations in other industries, women are primarily employed as unskilled labourers in the construction business (Baruah, 2010). They are mostly

involved in jobs that require physical labour, such as carrying materials to higher floors, cleaning, and so on. They are not given the opportunity to learn skills such as carpentry or masonry work, or to advance in the site hierarchy. In a study spanning four nations, India, Mexico, Ghana, and Jamaica, it was discovered that India has the greatest gender-based work disparity (Habitat, 1997 as quoted in Barnabas et al., 2009). According to Ahuja and Kumari (2012), Sangweni and Root (2015), and Akinlolu and Haupt (2020), the typical barriers of women professionals in the construction or built environment include.

Women's issues are at the forefront in most emerging countries, including Nigeria. The Nigerian government has made a number of steps, including rules for equal rights for men and women, but the results have yet to be seen. Similarly, other governments are making efforts in this field (Ahuja and Kumari, 2012). Contextual and external factors appear to play a considerable impact in defining the career choices of South African women in construction, according to opposing patterns in their professional growth. Numerous studies intended at examining the falling participation in construction among South African women, according to Sangweni and Root (2015), it may not adequately represent the dynamics of career choices for women desiring to work in construction. As a result, the research aims to broaden the scope of the SCCT beyond its individualistic foundations to include more social and environmental aspects (Sangweni and Root, 2015; Akinlolu and Haupt, 2020). The interaction of gender and socioeconomic backgrounds with outcome expectations (OTX), goal representations (GRP), learning experiences (LEX), access to support structures, social supports (SSP), the socialization process, interests (INT), gender role stereotypes, self-efficacy (SEF), perceived barriers, and their influences on women's career choice behaviour in construction are highlighted in the conceptual model in Figure 1. These determinants are expected to have varied effects on the professional behaviour of men and women, as well as women from diverse socioeconomic backgrounds.

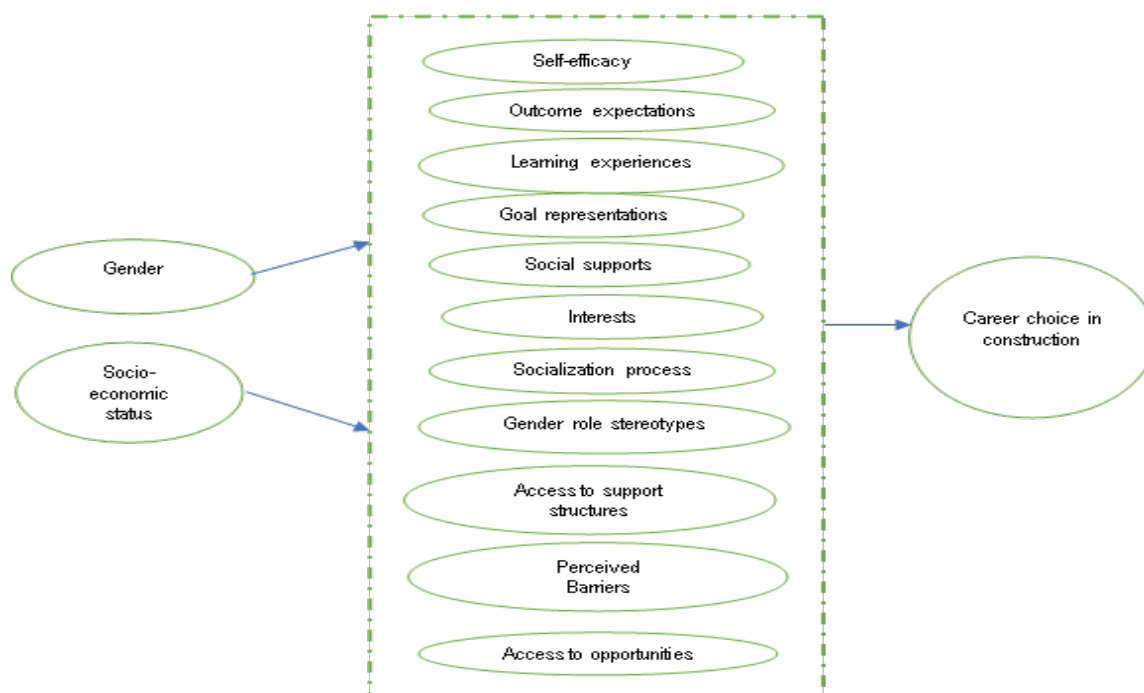


Figure 1: Model of Career Choice in Construction-related Industries

Source: Akinlolu and Haupt, 2020

According to Adeyemi et al. (2006), women make up about half of Nigeria's human resources, yet only 16.3 percent of the workforce in the business is female. Nearly half of these women work as labourers, 37.5 percent as secretaries, 10% as office workers, and 2.5 percent as craftspeople. Men make up more than 90% of the Nigerian construction workforce, according to the National Bureau of Statistics (NBS, 2015), despite the fact that women make up more than half of the total workforce. Male employees represented 91.38

percent in 2010, 91.61 percent in 2011, and 91.52 percent in 2012, according to the allocation of male employees in the industry from 2010 to 2012. (NBS, 2015).

In their study of the barriers to female participation in the Nigerian construction industry, Akinsiku and Ajala (2018) discovered that the perceived male-dominated nature of the industry, as well as family commitments such as marriage and childbirth, are to blame for female underrepresentation. However, while it has been proved that both men and women have equal opportunities in the sector, the lack of flexibility in working conditions is also a barrier for female newcomers.

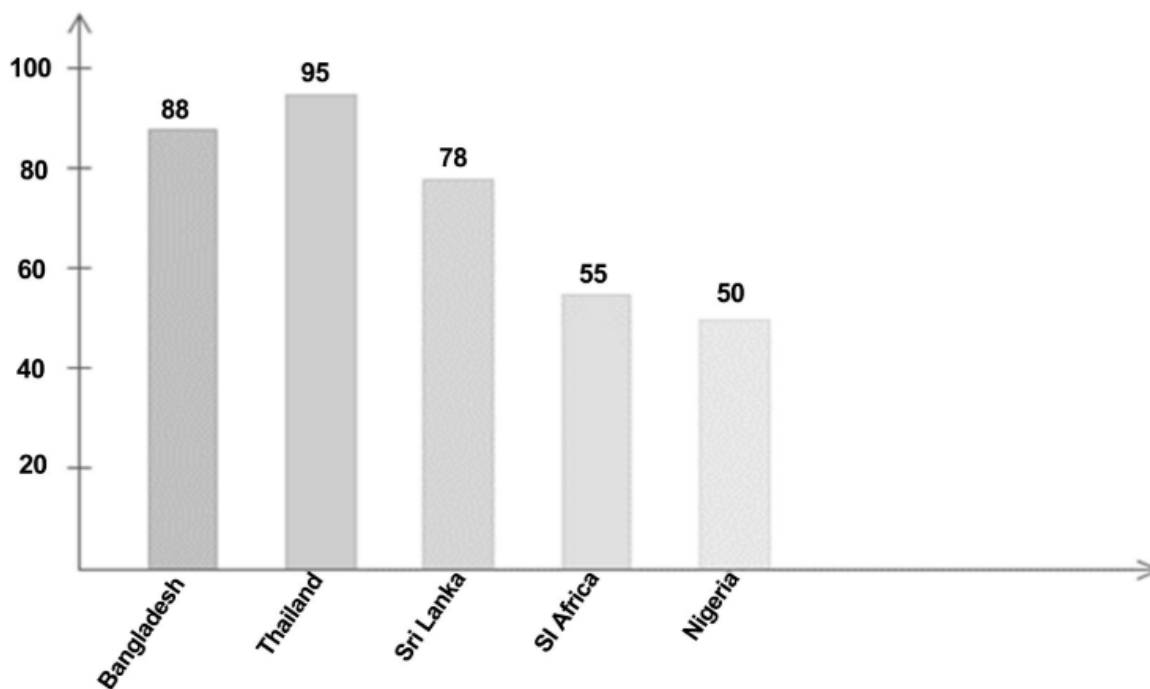


Figure 2. Percentage of Women engaged as Labourers in construction work in some developing countries. Source: Adeyemi et al. (2006).

Because of sociocultural attitudes or constraints, the latent resources of women in poor countries have remained untapped. Women are not allowed to work in the construction business in some African countries, for example. Across Asia, the number of women working in the construction industry outnumbers the number of men. According to Wells (2004), women account for 88 percent, 95 percent, and 78 percent of the employees in the construction industry in Bangladesh, Thailand, and Sri Lanka, respectively. The author emphasized that the majority of women employed on construction sites in Asia work as labourers, helpers, and managers of building material sites (see Figure 2), whereas women in Western countries work in administrative, technical, and professional jobs. In some of these Asian countries, women have a low status in the labour market; in fact, they are regarded as people who can only perform low-skilled labour and serve as head-load carriers (Well, 2004). They perform some of the most tough and difficult occupations and are paid less than men who perform equivalent tasks. They are sometimes not paid at all, and in the majority of cases, payment is made to their husbands (Wells 2004 cited in Jimoh et al. 2016). In South Africa, for example, when women hold 55 percent of social-related employment, the construction industry only accounts for 12.4 percent of all job categories due to public disapproval, as reported by (Statistics South Africa, 2003). According to a study conducted by Adeyemi et al, (2006) on the proportion participation of men and women in the construction business, 50 percent of women are employed as labourers in Nigeria. Akinsiku and Ajala have reported on this (2018) In Nigeria's construction business, women have remained disproportionately underrepresented. In a typical construction firm, women are always underrepresented. The goal of this study was to identify the barriers that contribute to the industry's fundamental problem. The underrepresentation of women in the construction sector is due to the perceived male-dominated

character of the profession and family commitments such as marriage and childbirth, according to the study's findings.

Table 1. Industrial classification of workers in Nigeria as of 2008

Industry	Female	Percentage	Male	Percentage	Total
Agriculture	7,029,237	36.5	12,207,075	63.5	19,236,348
Fishing	188,831	1.0	293,901	1.5	482,732
Mining	40,301	0.2	152,860	0.8	193,161
Manufacturing industry	1,197,538	6.2	1,084,390	5.6	2,281,928
Electricity, gas and water	68,582	0.4	233,072	1.2	301,654
Construction industry	37,445	0.2	620,749	3.2	658,194
Retail trade	5,796,543	30.1	3,037,550	15.8	8,834,093
Hotel restaurant business	163,561	0.9	53,557	0.3	217,118
Transportation and communication business	96,300	0.5	1,308,250	6.8	1,404,550
Finance business	52,088	0.3	74,337	0.4	126,425
Real estate business	187,984	1.0	226,263	1.2	414,247
Administration and defence	477,061	2.5	1,352,562	7.0	1,909,149
Education	915,040	4.8	994,109	5.2	475,328
Health and social welfare	292,143	1.5	183,185	1.0	475,328
Social services	727,588	3.8	1,112,014	5.8	1,839,602
House helper	98,320	0.5	99,616	0.5	197,936
Others	16,113	0.1	50,325	0.3	66,438
Total	17,484,163	43.1	23,053,815	56.9	40,567,978

Source: Federal Ministry of Women Affairs and Social Development, Cite Jimoh et al. (2016)

Table 2. Identified barriers towards women participation in the built environment industry

S/N	Identified Barriers	Authors
1	Sexist attitudes, behaviours, and perceptions	Bagilhole et al. (2000), Menches and Abraham (2007), Worrall, et al. (2010), NAWIC (2013)
2	Institutionalized Discrimination (glass ceiling)	Moore (2006)
3	Lack of role models and unfair assessment of training needs	Bagilhole, Dainty and Neale (2000) NAWIC (2013)
4	Balancing work and family life	NAWIC (2013) Hatipkarasulu and Roff (2011)
5	Long working hours	NAWIC (2013) Amaratunga, et al. (2006)
6	Isolation on job sites	Dainty and Lingard (2006)
7	Small representation on job sites	Menches and Abraham (2007)
8	Stress	Loosemore and Waters (2004)

9	Limiting Slow career progression / low potential for career advancement	English and Le Jeune (2012) Menches and Abraham (2007)
10	Undervalued	Loosemore and Waters (2004)
11	Expectation of mimicking males' aggressive behaviour habits	NAWIC (2013)
12	Medical related conditions	Akinlolu and Haupt, (2020).
13	Negative perceptions of women capabilities	Worrall, et al. (2010), NAWIC (2013)

Source: Author compiled 2022.

FINDINGS OF THE STUDY

Findings of the study shows that existing barriers such as sexist attitudes, long working hours, balancing family and work life, medical related conditions such as pregnancy and maternity, perceived high stress, mobility nature of the industry, lack of awareness and policies among others still exist in the industry without any sign of improvement rather continuous depreciation of women participation. In Europe, women are much more represented in the built environment industry almost similar to their men counterpart more especially in Australia, Germany, and France. In Asian countries women participation is high however they are perceived not to possessed the require skills to operate as a professional in the industry, even though the number of women in the built environment is high, they only operate at a very lower level usually as unskilled labour which is more or less the case in African countries as well as Nigeria.

DISCUSSION

In Nigeria the built environment is still strongly men oriented even though there are good numbers of women who are trained academically with hope of balancing the unequal diversity ravaging the industry however they end up after graduation venturing into other businesses. This has been continuous decline in the industry manpower as a result leading to low productivity. Also, awareness and encouragement has been on the low. There are scanty studies to critically assess the barriers towards participation of women in the industry and in most cases; these few studies are not empirical oriented. In the case of Nigerian built environment industry, women are not even regarded to be capable of executing the skilled tasks involved thereby little or no attention is paid to women participation in the industry. To conclude the study, women's participation should be encouraged from the grassroots level, more empirical studies should be carried out, increase awareness, encourage gender diversity and policies (government and professional bodies) to protect women's rights in built environment industry to encourage their participation.

REFERENCE

1. Adeyemi, A. Y., Ojo, S. O., Aina, O. O., & Olanipekun, E. A. (2006). Empirical evidence of women under-representation in the construction industry in Nigeria. *Women in Management Review*, 21(7), 567–577. <https://doi.org/10.1108/09649420610692516>
2. Ahuja, V., & Kumari, S. (2012). Issues and challenges for women in construction industry: global as well as Indian perspective. In *Proceedings of the 18th Annual Convention and Seminar on Training Skill Upgradation and Competence Development in Building Industry, New Delhi* (pp. 55-60).
3. Akinlolu, M. T., & Haupt, T. C. (2020). Gender and Women in Construction: A Conceptual Model of Career Choice. *Humanities (BMESH–2020)*, 14, 16.
4. Akinsiku, O. E., & Ajala, N. O. (2018). An Investigation of Barriers to Females' Involvement in the Nigeria Construction Industry. *Nigerian Journal of Environmental Sciences and Technology*, 2(2).

- <https://doi.org/10.36263/nijest.2018.02.0075>
5. Amaratunga, D., Haigh, R., Shanmugam, M. and Elvitigala, G., (2006). *Current status on construction and women in the North West of England, Industry Report*: Manchester, UK: ESF Regional.
 6. Baruah, B. (2010) "Women and globalisation: challenges and opportunities facing construction workers in contemporary India", *Development in Practice*, vol. 20, no. 1, pp. 31-44.
 7. Bagilhole, B.M., Dainty, A.R. and Neale, R.H., (2000). Women in the construction industry in the UK: a cultural discord? *Journal of Women and Minorities in Science and Engineering*, 6(1), pp. 40-9. <https://doi.org/10.1615/JWomenMinorScienEng.v6.i1.40>
 8. Charity-Leeke, P. C. (2012). *Women in engineering: A phenomenological analysis of sociocultural contextual meaning of gender roles*. Cleveland State University.
 9. Dainty, A., Neale, R. and Bagilhole, B., (2000). Comparison of Men's and Women's Careers in U.K. Construction Industry. *Journal of Professional Issues in Engineering Education and Practice*, 126(3), pp. 110- 15. [https://doi.org/10.1061/\(ASCE\)1052-3928\(2000\)126:3\(110\)](https://doi.org/10.1061/(ASCE)1052-3928(2000)126:3(110))
 10. Dainty, A.R. and Lingard, H., (2006). Indirect discrimination in construction organizations and the impact on women's careers. *Journal of Management in Engineering*, 22(3), pp. 108-118. [https://doi.org/10.1061/\(ASCE\)0742-597X\(2006\)22:3\(108\)](https://doi.org/10.1061/(ASCE)0742-597X(2006)22:3(108))
 11. Eccles, J. S. (1987). Gender roles and women's achievement-related decisions. *Psychology of women Quarterly*, 11(2), 135-172.
 12. Hatipkarasulu, Y. and Roff, E.S., (2011). Women in construction: An early historical perspective. In: *Associated Schools of Construction (ASC) 47th ASC Annual International Conference Proceedings*. University of Nebraska-Lincoln, 6-9 April 2011. Omaha, NE: ASC.
 13. Jimoh, R.A., Oyewobi, L.O., Adamu, A.N. and Bajere, P.A. (2016) Women Professionals' Participation in the Nigerian Construction Industry: Finding Voice for the Voiceless. *Organization, Technology and Management in Construction: An International Journal*, 8, 1429-1436. <https://doi.org/10.1515/otmcj-2016-0005>
 14. Lent, R. W., Brown, S. D., Schmidt, J., Brenner, B., Lyons, H., & Treistman, D. (2003). Relation of contextual supports and barriers to choice behavior in engineering majors: Test of alternative social cognitive models. *Journal of counseling psychology*, 50(4), 458.
 15. Loosemore, M. and Waters, T., (2004). Gender differences in occupational stress among professionals in the construction industry. *Journal of Management in Engineering*, 20(3), 126-132. [https://doi.org/10.1061/\(ASCE\)0742-597X\(2004\)20:3\(126\)](https://doi.org/10.1061/(ASCE)0742-597X(2004)20:3(126))
 16. Madikizela, K., & Haupt, T. (2010). Influences on women's choices of careers in construction: a South African study. *Australasian Journal of Construction Economics and Building*, The, 10(1/2), 1-15.
 17. Male, S. A., & MacNish, C. (2015). Pilot exploration of gender inclusivity of engineering students' exposure to engineering practice in an Australian university. *Australasian Journal of Engineering Education*, 20(2), 135-144.
 18. Menches, C.L., and Abraham, D.M., (2007). Women in Construction - Tapping the untapped resource to meet future demands. *Journal of Construction Engineering and Management*, 133(9), pp. 701-707. [https://doi.org/10.1061/\(ASCE\)0733-9364\(2007\)133:9\(701\)](https://doi.org/10.1061/(ASCE)0733-9364(2007)133:9(701))
 19. Moore, J.D., (2006). *Women in construction management: Creating a theory of career choice and development*. PhD. Colorado State University.
 20. National Bureau of Statistics (2015). Nigerian construction sector summary report: 2010-2012. Available at <http://www.nigerianstat.gov.ng/report/265>. [Accessed 10 Feb. 2022].
 21. NAWIC, (2013). What women want from construction careers. [online] Available at: http://www.nawic.com.au/documents/NAWIC/15-04-13_national_nawic_discussion_paper.pdf
 22. Saifuddin, S. M., Dyke, L. S., & Rasouli, M. (2013). Gender and careers: a study of persistence in engineering education in Bangladesh. *Gender in Management: An International Journal*.

23. Sangweni, N., & Root, D. (2015). *Women in Construction: Hindrances that shorten the professional working life of female site engineers on construction sites in South Africa* (Doctoral dissertation, University of the Witwatersrand, Faculty of Engineering and the Built Environment).
24. Statistics South Africa (2003) Labour Force Survey. Statistics South Africa, Pretoria.
25. Worrall, L., Harris, K., Stewart, R., Thomas, A. and McDermott, P., (2010). Barriers to women in the UK construction industry. *Engineering, Construction and Architectural Management*, 17(3), pp. 268-81. <https://doi.org/10.1108/09699981011038060>
26. Wells, J. (2004) Female Participation in the Construction Industry. International Labour Office, Geneva.