

INFLUENTIAL FACTORS OF UNSUCCESSFUL MENTORSHIP FOR WOMEN IN CONSTRUCTION: A CASE OF SOUTH AFRICA'S CONSTRUCTION INDUSTRY

SAMUEL H.P. CHIKAFALIMANI¹ and ASIPHE GWELE²

^{1,2}Department of Construction Management & Quantity Surveying, Durban University of Technology, Durban, South Africa.E-mail: ¹samuelc@dut.ac.za; ²21958535@dut4life.ac.za

Abstract:

Factors influencing unsuccessful mentorship of women are still being reported in the construction industry in South Africa. Use of publications on mentorship of women in construction and appropriate data from relevant professional bodies in South Africa were the research approaches applied to collect data for the study. Results of the study revealed that: lack of interest by top management in the mentorship of female construction workers, failure of mentors to hold proper construction mentorship meetings for women in construction, stressful construction work deadlines and unreasonable workload allocation to women mentees in construction, negative attitude of mentors towards female mentees in construction, and shortage of right mentors for construction female mentees are the current main factors causing unsuccessful women mentorship in the construction industry in South Africa. The reported challenges have caused: poor performance, slow career development, minimal entrepreneurial abilities, poor retention and marginalization of women in the construction industry in South Africa. High quality construction education; entrepreneurial, technical and leadership skills; and women empowerment techniques were identified as some of the main interventions that can be introduced in the mentorship programs for women in construction in South Africa in order to successfully mentor women in the sector. Findings of the study will contribute to knowledge by supporting the successful mentorship of women in construction, achievement of women empowerment and development goals, and eradication of gender participation and income imbalances in the construction industry in South Africa and other countries in the

Keywords: Women in construction, causes of unsuccessful mentorship, outcomes of unsuccessful mentorship, construction industry, South Africa

1 INTRODUCTION

Challenges still continue to be reported of unsuccessful mentorship of women in the construction industry in South Africa (Chikafalimani, Kibwami & Moyo 2021; Okwel, Alinaitwe & Kalumba 2019; Oyewobi et al. 2019). These mentorship challenges have been caused by several factors and have contributed significantly to enormous problems that women in construction are currently facing including: less participation of women in the construction industry, and lower income payments to women in construction than men (Alewi, Talukhaba & Opaleye 2016). Consequences of these challenges are given in Table 1 below, which shows the number of construction workers in year 2022 in South Africa. Table 1 illustrates clearly that there is indeed currently less participation of women in the construction sector in South Africa than men. As noted in Table 1, out of a total of 1,073,000 construction workers, the construction industry only employed 139,490 female construction workers, representing 12% of the total construction workers (Statistics South Africa 2022).





This is sad. By having less women represented and working in the sector, it exactly means women are minimally benefiting from construction business than men in South Africa. Successful mentorship of women in construction in South Africa is one major solution that could support successful entry and participation of women in the construction sector in order to address the current gender employment imbalance in the sector, hence allowing too more women in the country to receive income and other benefits accruing from construction business (Ndimande 2019). More importantly, it is essential to rectify this gender imbalance since the construction industry in South Africa is one of the major sectors contributing significantly towards employment and economic development of the country. This is supported by its current contribution of 2% to the gross domestic product of the country (CIDB 2022).

Table 1: Construction Workers in South Africa, 2022

Gender	Year: March 2022	Percentage Contribution (%)
Females	128,000	12
Males	945,000	88
Total	1,073,000	100%

(Source: Statistics South Africa 2022)

2 LITERATURE REVIEW

Literature review indicates that some researchers and publishers have written and published a number of papers and publications on mentorship of women in construction in South Africa. Afolabi, Akinbo & Akinola (2019) revealed that lack of interest by top management in the mentorship of female construction workers in most organizations is one of the major factors causing unsuccessful mentorship of women in construction. They added that this had created serious problems for women in the construction industry in South Africa, which include the domination and more participation of men in construction than women. This was supported by the evidence given in the Statistics South Africa April 2022 labour survey report shown in Table 1. Chikafalimani, Kibwami & Moyo (2021) emphasized that this undesirable gender employment inequality gap has economically worsened women's construction health and safety in South Africa.

Research undertaken in South Africa also indicated that the failure of mentors for women in the construction industryto hold proper construction mentorship programs and meetings with the women significantly contributed towards high levels of unsuccessful mentorship for women in construction (Aigbavboa, Oke & Mutshaeni 2016). The authors further argued that by failing to hold proper planned mentorship meetings, women were left out without being properly trained and equipped with appropriate skills in construction. Ndimande (2019) agreed and noted that the consequence of lack of good training and appropriate construction skills, has been the marginalisation of women from income opportunities existing in the construction industry since only a few of them can be employed and qualify to take up high paying positions in a sector that demands high level of entrepreneurial and construction skills. In addition to low income, unsuccessful mentorship has made women in construction receive







fewer related benefits including lack of medical support and childcare from there construction employers. In the process, this gender income and benefits imbalance has exposed women to more health and safety challenges in South Africa (Chikafalimani, Kibwami & Moyo 2021).

The reviewed literature also reported that unreasonable work load allocation and stressful deadlines for construction work tasks caused unsuccessful mentorship of women in the construction industry in South Africa (Aigbavboa, Oke & Mutshaeni 2016). This occurred because women and men have physiological differences, which made male workers, endure construction work more than females (Okonkwo 2019; Oyewobi et al. 2019). Since by nature, construction work is hard, construction employers ought to be considerate with work allocation to women on construction sites in order to promote high retention of women and successful mentorship exercises in the sector. Reports by World Bank (2019), World Health Organization (2011) and International Labour Organisation (2010) also highlighted that employment conditions for construction women in South Africa were unfavourable and did not match well with their responsibilities as mothers and caregivers to their families, communities and countries and instead perpetuated unsuccessful mentorship of women in the sector. These poor working conditions contributed negatively by forcing women to stop working in the construction industry.

In South Africa, negative attitude of mentors towards female mentees has also hindered successful mentorship of women in the construction industry. Oke (2017) noted that this bad construction industry practice manifested in two forms. Firstly, construction employers neglected the provision of adequate security to women on construction sites, which resulted into high cases of sexual harassment and undermining of female mentees by males on construction sites. Secondly, construction employers have exhibited negative attitude towards women in construction by failing to supply them with appropriate protective construction clothing and equipment suited for women on construction sites. Okwel, Alinaitwe & Kalumba (2019) lamented that this too seriously exposed women to construction site accidents and also undermined their dignity in society for not being considered in the design and provision of suitable protective construction clothing and equipment, which met their requirements. The result of these hostilities has been negative impact on the successful mentorship and entry of more women workers into the construction industry in South Africa (Ndimande 2019).

The report by the Department of Human Settlements (DHS) in South Africa released in Year 2021 also emphasized that the shortage of right mentors for construction female mentees has hindered successful mentorship of women in the construction industry in South Africa. Additionally, the DHS (2021) lamented that lack of right mentors, had critically reduced the capacity of the construction industry in South Africa to mentor enough women to take up important roles and high positions in the sector. This has made the majority of women continue taking up less paying and unskilled jobs on construction sites that include cleaning and clerical roles (DHS 2021). This paper intervenes by identifying factors that can be implemented to promote successful mentorship of women in the construction industry in





South Africa in order to improve their economic, health and safety requirements in the country.

3 RESEARCH METHODOLOGY

The mixed research method (Creswell & Poth 2016; Creswell 2014), which requires a combination of multiple data gathering techniques including the analysis of appropriate reports and data bases of relevant professional bodies and institutions dealing with construction, were used to collect data for the paper and specifically on factors influencing the mentorship of women in the construction industry in South Africa. Furthermore, two main research tasks were executed in order to complete the study. Firstly, a detailed literature search on relevant research publications and reports on the factors that influenced the mentorship of women in construction in South Africa was conducted. Secondly, analysis of data from appropriate construction professional bodies and institutions in South Africa was undertaken to gather data on gender imbalances that were influenced by poor mentorship of women in construction. Data collected for the study was limited to relevant publications and professional body data bases related to mentorship of women in construction that were easily accessible on the internet and written in English language.

4 FINDINGS, ANALYSIS AND DISCUSSION

Findings of the study on the factors contributing towards unsuccessful mentorship of women in the construction industry in South Africa are critical. The identified challenges together with their proposed solutions are analyzed and discussed in the subsequent section in detail.

4. 1 Top management's lack of interest in the mentorship of women in construction

Lack of interest by top management of the construction employers in the mentorship of female construction workers emerged in the study as one of the major factors that is influencing unsuccessful mentorship of women in South Africa (Afolabi, Akinbo & Akinola 2019). The consequence of lack of support from top management has caused serious challenges for women in construction in South Africa including poor performance and less availability of qualified female workers in the construction sector. As expected, these challenges have worsened the situation for women in construction, resulting into further marginalization and less participation of women in the construction industry in South Africa. Table 2 clearly illustrates this concern. As noted from Table 2, in year 2021, out of a total of 2,720 registered construction professionals, only 7% (179) were female registered construction professionals in the country (SACPCMP 2021). These gender representations are indeed unacceptable as they emphasize the fact that men have dominated the construction industry in South Africa, leaving women with a small portion of participation. Norberg & Johansson (2021) suggested intensive awareness campaigns led by government and relevant partners that are directed towards top management of construction employers in order to motivate and encourage them to prioritize mentorship programs for women in construction in their organizations as one major solution to achieve successful mentorship of women in the sector in the future. In addition, Norberg & Johansson (2021) and Afolabi, Akinbo & Akinola





(2019) recommended that government and the construction industry work together on laws and policies that can be used to encourage top management of construction employers to create conducive and successful mentorship environment in order to attract women to join the construction profession and increase their participation in the sector.

Table 2: Registered Construction Professionals in South Africa, 2021

	Gender	Number	Percentage Contribution (%)
1	Females	179	7
2	Males	2541	93
	Total	2,720	100%

(Source: SACPCMP Annual Report, 2021)

4. 2 Failure of mentors to hold proper mentorship programmes for women

Failure of mentors to hold proper mentorship meetings and programs for women in the construction industry in South Africa has also facilitated enormously the unsuccessful mentorship of women in the sector (Oke 2017). This was unaccepted as it has widened the gender income and benefits inequality gap characterizing the construction sector by delaying career development and equipment of women with the necessary construction skills that are required for them to take up high positions in the construction industry (Okonkwo 2019; Oyewobi et al. 2019). DHS (2021) and National Home Builders Registration Council (NHBRC) (2021) recommended that government and the construction industry, as partners, play significant roles in the improvement of construction education and skills for women in South Africa. High quality construction education; women empowerment techniques; and entrepreneurial, technical and leadership skills were identified by DHS (2021) and NHBRC (2021) as key topics that should be incorporated in the training for women to ensure that they successfully complete their mentorship exercises in construction. Furthermore, Okonkwo (2019) and Oyewobi et al. (2019) proposed that resources must be made available in the form of bursaries, scholarships and grants by governments and their partners to enable women attend higher education in construction skills at universities and other tertiary institutions in South Africa in order to support them get trained and graduate as specialised construction professionals. Chikafalimani, Kibwami & Moyo (2021) noted that these highly qualified construction women graduates will easily succeed in their mentorship programs and will qualify for high positions in the construction industry in South Africa and earn equally higher incomes like men in the sector. This could eventually address most of the needs of women in construction health and safety in South Africa in the future and also minimize the income inequality gap between the two genders (Ndimande 2019).

4. 3 Unreasonable work load allocation and stressful construction work deadlines

Many forms of unfavourable employment conditions for women working on construction sites have been reported in South Africa including unreasonable work load and stressful construction work deadlines as well as long and abnormal working hours, which are noted to have increased musculoskeletal disorders (MSD) in women on construction sites (Chikafalimani, Kibwami & Moyo 2021). Alewi et al. (2016) further commented that women







developed MSD on construction sites, which are caused by lifting heavy objects due to the fact that women are more vulnerable to MSD than men due to their physiological nature. In addition, Ghani (2017) lamented by noting that women construction workers can also be exposed to reproductive hazards on construction sites by inhaling toxic chemicals. Okonkwo (2019) concluded that all these unfavourable work circumstances have contributed to unsuccessful mentorship of women in construction by neglecting their wellbeing, health and safety. Following from this, unpleasant outcomes have been exhibited by women in construction, which include: poor performance, slow career development and minimal construction entrepreneurship abilities (Afolabi, Akinbo & Akinola 2019). As reported by Oyewobi et al. (2019), this was unfortunate since such gender malpractices and their outcomes have further accelerated the departure of women from the construction sector and discouraged most women to join construction practice and business. Oyewobi et al. (2019) emphasized that construction employers should remember the critical community, family and childcare responsibilities women also undertake as they plan construction work tasks to be allocated to them. In order to address all these challenges, World Bank (2019), World Health Organization (2011) and International Labour Organisation (2010) proposed that construction employers introduce comfortable employment conditions and workplace environment for women in construction to improve their work productivity, health, general well-being and mentorship success. In the South African context, construction employers are legally bound too to follow the Employment Equity laws, which put emphasis on offering fair employment conditions to all workers including construction women since this is one of their fundamental constitutional rights (Chikafalimani, Kibwami & Moyo 2021). (Chikafalimani, Kibwami & Moyo 2021) also noted that trade unions have played active roles to protect workers' rights including rights for women workers in South Africa.

4. 4 Negative attitude of mentors towards female mentees in construction

Strachan et al. (2018) and Yokwana, Ndihokubwayo & Windapo (2016) mentioned that negative attitude of mentors towards female mentees has also hindered successful mentorship of women in construction in South Africa. This bad construction industry practice is quite common, and unfortunately, it has remained unchecked for many years since construction work has been associated with the male gender (Alewi, Talukhaba & Opaleye 2016; Okonkwo 2019). On top of this, this tendency has been directed towards women in construction in two main ways. Firstly, American Society of Safety Professionals (2021) outlined that over the years, the preference of design and procurement of construction protective clothing and equipment has been for male and not female construction workers. Okonkwo (2019) and Okwel, Alinaitwe & Kalumba (2019 identified a change in the management style and attitudes of construction employers to start taking women's needs in construction protective clothing and equipment seriously in order to support them work comfortably, protect them from construction site accidents, attract them to join the construction sector and eventually make their mentorship programs in the sector a success. This includes introduction of purchase procedures in the construction organizations, which recognized procurement of construction protective clothing and equipment suitable for use by women as well. Ghani (2017) and the American Society of Safety Professionals (2021)







propose intensive innovation and design in the area of suitable protective clothing and equipment for women in construction in order to encourage them to join the construction sector by meeting their clothing needs.

Secondly, while women construction workers have reported and complained of sexual harassment and discrimination on construction sites, surprisingly their employers have not satisfactorily supported them and addressed their concerns (Alewi, Talukhaba & Opaleye 2016). In addition, Okonkwo (2019) and Alewi, Talukhaba & Opaleye (2016) indicated that incidences of lack of adequate security and other facilities including dirty toilets for women on construction sites in South Africa have again raised more concerns. They added that temporary construction site toilets more often are dirty and have doors that are not securely lockable or not functioning properly. These incidences that were perpetuated through mostly bad and uncaring attitudes of construction employers have created serious security and health threats to women working on construction sites, leaving them with no option but to quit the construction profession and join other professions that considered their dignity. Norberg & Johansson (2021) suggested that construction employers should urgently address concerns raised by women of sexual harassment, discrimination, lack of security and essential facilities on construction sites in order to promote successful mentorship of women in construction and subsequently increase their retention in the construction industry. Fortunately, South Africa introduced Occupational, Health and Safety laws among others to encourage construction employers to comply with no sexual discrimination and supply of suitable protective construction clothing and equipment to all construction workers including women (Chikafalimani, Kibwami & Moyo 2021). In Year 2021 the Department of Labour (DL) in South Africa indicated that what was required in the future is more enforcement by government and their partners through construction site inspectors to ensure that construction employers are providing suitable protective clothing and equipment and safety to their employees including women to fast track successful mentorship of female mentees in the sector.

4.5 Shortage of right mentors for construction female mentees

Ndimande (2019) and Yokwana, Ndihokubwayo & Windapo (2016) argued that the current scarcity of skilled mentors in the construction industry in South Africa, including the shortage of right mentors with keen interest to specifically uplift skills of women in construction has been another serious blow to the construction sector. In Table 3 below, it is shown that in year 2021 the construction industry in South Africa had only a total of 13 construction mentors, out of which, two are females and 11 are males. This evidence confirms that the country has an acute shortage of construction mentors, which has indeed enormously compounded existing challenges of women empowerment in the construction industry in South Africa by further slowing down the pace of producing well mentored and trained women in construction for the country. Some of the disappointing serious consequences that have resulted from this dilemma are: poor performance, slow career development, limited entrepreneurial confidence, poor retention and marginalization of women in the construction industry in South Africa (Yokwana, Ndihokubwayo & Windapo 2016). Chikafalimani,





Kibwami & Moyo (2021) recommended transformation of construction education at universities and other tertiary institutions so that it should contribute significantly in the enrolment and mentoring of female students in construction who would graduate as competent construction professionals ready to hit ground running and compete intensely with male professionals in the sector. These well qualified and educated female construction professionals will be in a much better position to train and mentor other women in construction as well since they understand better the needs and challenges of fellow women in the sector than men (Strachan et al. 2018). Ndimande (2019) also recommended that government and its partners in the construction industry in South Africa should join hands in the preparation of a suitable training package targeted at successful mentorship of women in construction. Additionally, Ndimande (2019) noted that the proposed training package should be structured in such a way that it should contain critical construction training needs for women to make them become prosperous construction business women and practitioners. Their training package should, among other essential topics, also consist of women empowerment, entrepreneurial, technical and leadership skills (DHS 2021; NHBRC 2021). This form of training will support women in construction to have full confidence in themselves and take up top positions in construction organisations and businesses both in the private and public sectors.

Table 3: Registered Construction Mentors in South Africa, 2021

	Gender	Number	Percentage Contribution (%)
1	Females	2	15
2	Males	11	85
	Total	13	100%

(Source: SACPCMP Annual Report 2021)

5 CONCLUSION AND FURTHER RESEARCH

This paper has described in detail the influential factors of unsuccessful mentorship for women in the construction industry in South African. Two main research approaches were implemented in order to collect critical data for the study, namely: use of relevant publications on influential factors of unsuccessful mentorship for women in construction in South Africa and analysis of data obtained from reliable construction professional bodies and other relevant organisations in South Africa to elaborate gender imbalances that exist in this industry. Results of the study revealed that: lack of interest by top management in the mentorship of female construction workers, failure of mentors to hold proper construction mentorship meetings for women in construction, stressful construction work deadlines and unreasonable workload allocation to women mentees in construction, negative attitude of mentors towards female mentees in construction, and shortage of right mentors for construction female mentees are the main influential factors of unsuccessful mentorship for women in the construction industry in South Africa. Sadly, undesirable outcomes have resulted from these influential factors, which have worsened the circumstances of women in construction in South Africa including: poor performance, slow career development, minimal







entrepreneurial abilities, poor retention and marginalization of women in the construction sector. The study also noted that the undesirable outcomes of unsuccessful mentorship of women in the construction industry in South Africa, have further exposed women to enormous problems they are facing today including: less participation of women in the sector and lower income and less benefits being given to women.

The following specific **recommendations** have been given by the study in order to overcome the causes of unsucessful mentorship for women in the construction industry in South Africa:

- . Government and its partners must conduct campaigns targeted at top management of construction employers to make them aware of their critical responsibilities to ensure successful mentorship of women in the construction industry in South Africa. This recommendation will also support top management of construction employers in South Africa to become interested and prioritize mentorship programs for female mentees in construction in South Africa to make sure that just like men, women acquire too essential construction skills.
- . Government and its partners in the construction industry in South Africa must intensify the production of more well qualified construction mentors, with skills too in mentoring women, to speed up the mentoring of more female construction mentees in the sector. This recommendation will support more women in construction in South Africa to qualify for top positions and other meaningful construction roles in the sector. In the long run, this recommendation will help too to solve many challenges women in construction are facing including the reduction of gender participation and income imbalances that are highly prevalent in the construction industry today.
- . Government and its partners must offer special education to men on construction sites to teach them to treat women construction workers at the workplace well in South Africa. This recommendation will promote successful mentorship of women in construction and their retention in the sector through the provision of respect to women on construction sites and avoiding sexual harassment practices. Additionally, men should be educated to understand the physiological characteristics of women and the critical roles they play in their families and community. This will enable reasonable allocation of construction work tasks to women and provision of good security and facilities to women on construction sites. Through the provision of good working conditions to women on construction sites, their success rate in the mentorship programs will improve too.
- . Government and its partners must include relevant topics in the mentorship training programs to ensure that successful well mentored women construction workers are produced in the sector. This training package should incorporate some of the following significant topics for female construction mentees: high quality construction education, women empowerment techniques, entrepreneurial, technical and leadership skills.
- . Enrolment of significant numbers of female students at universities and other tertiary institutions offering construction education and research in South Africa. Additionally, government and its partners must allocated adequate resources to support female students





during their studies including allocation of bursaries, grants and scholarships to them. This recommendation will speed up the graduation of female construction professionals who can easily succeed in the mentorship programs for women in the construction industry in South Africa. Construction tertiary education will equip female construction workers with the required entry skills into the construction profession, which will support them to succeed in their mentorship programs at the construction work place.

. Government and its relevant partners should introduce and implement laws and policies to encourage construction employers to comply and create comfortable mentorship environment for women on construction sites in South Africa. In addition, incentives should be given to construction employers that are supporting women and executing successful mentorship programs for them in the construction sector.

The study also recommends continued and **further research** in this important area of successful mentorship of women in the construction industry in South Africa to address existing challenges they are facing today. Through this study it was noted that there are several essential research topics and recommendations that can be investigated and published to address specifically the requirements of successful mentorship for women in the construction industry in South Africa with the main goal of increasing their participation and benefiting from the sector in the future.

References

Afolabi, A.O., Akinbo, F.T. & Akinola, A., 2019, 'Improving career development through a women mentoring program in the construction industry', Journal of Physics, Conference Series, 1378 (4):042031.

Aigbavboa, C., Oke, A. & Mutshaeni, M., 2016, 'Challenges of mentoring in South African constructionindustry', Journal of Economics and Behavioural Studies, 8(6):183-187.

Alewi, M., Talukhaba, A. & Opaleye, O., 2016, 'Women's health and safety in the construction industry in South Africa', 9th CIDB Postgraduate Conference, February 2-4, Cape Town, South Africa, 386-398.

American Society of Safety Professionals Report, 2021, Women and safety in the modern workplace.

Chikafalimani, S.H.P., Kibwami, N. & Moyo, S., 2021, 'Addressing women's construction health and safety needs in Africa', HTS Theological Studies, 77 (2), 1-5 (Special Collection: Gender Justice, Health and Human Development).

Construction Industry Development Board (CIDB) Quarterly Monitor, March 2022, Construction employment in South Africa.

Creswell, J., 2014, A concise introduction to mixed research methods, SAGE publications, Inc.

Creswell, J.W. & Poth, C.N. 2016, Qualitative inquiry and research design: choosing among five approaches, 2nd ed. SAGE publications, Inc.

Department of Human Settlements (DHS) South Africa, Annual Report, 2021.

Department of Labour (DL) South Africa, Annual Report, 2021.

Ghani, R., 2017, 'Is PPE working for women?' Occupational Health at Work 13, 32-35.

International Labour Organization Report, 2010, providing safe and healthy workplaces for both women and men.





National Home Builders Registration Council (NHBRC) South Africa, Annual Report, 2021.

Ndimande, J., 2019, 'Causes for failure of women owned construction companies in KwaZulu-Natal Province, South Africa', unpublished PhD Dissertatio, University of KwaZulu-Natal, South Africa.

Nordberg, C. & Johansson, M., 2021, 'Women and ideal women: The representation of women in the construction industry', Gender Issues 38, 1-24.

Oke, A., 2017, 'Challenges facing mentees and mentors in the South African ConstructionIndustry: a case of Gauteng Region', The 9thInternational Conference on Construction in the 21st Century, March5-7, Dubai, UnitedArab Emirates.

Okonkwo, P., 2019, 'Health and safety management and performance among construction contractors in South Africa', PhD Dissertation Unpublished, University of Stellenbosch, South Africa.

Okwel, M., Alinaitwe, H. & Kalumba, D., 2019, 'Health and safety performance in the Ugandan construction industry', in Construction Health and Safety in Developing Countries, pp. 103-115, Sweden: Routledge.

Oyewobi, L., Oke, A., Adeneye, T. & Jimoh, R., 2019, 'Influence of organizational commitment on work-life balance and organizational performance of female construction professionals in Nigeria', Engineering, Construction and Architectural Management Journal 26 (10), 2243-2263.

South African Council for the Project and Construction Management Professions (SACPCMP) South Africa, Annual Report, 2021.

Statistics South Africa Quarter 1 Labour Force Survey Report, March 2022, Quarterly Labour Force Survey in South Africa (Quarter 1: 2022).

Strachan, R., Peixoto, A., Emembolu, I. & Restivo, M.T., 2018, 'Women in engineering:

Addressing the gender gap, exploring trust and our unconscious bias', in 2018 IEEE

Global Engineering Education Conference (EDUCON) proceedings, Santa Cruz de

Tenerife, Canary Islands, Spain, April 17-20, 2088-2093.

World Bank Report, 2019, Gender assessment, recommendations and action plan.

World Health Organization Report, 2011, Building healthy and equitable workplaces for women and men.

Yokwana, N.R.A., Ndihokubwayo, R. & Windapo, A.O., 2026, 'The influence of mentors'gender on the psychosocial and career mentoring of women in the South Africanconstruction industry', Journal of Construction Project Management and Innovation, 6 (2), 1392-1412.

