Mentorship as a tool for improving construction artisan's skills to achieve sustainable development Goal 8 via qualitative approach

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Abstract

Purpose – The paucity of artisans in some construction trades and the transitioning of the experience of the few for sustainability calls for concern. Mentorship programmes offer a promising mechanism to support construction artisans through those transitions. Mentorship may enhance artisan decent work and economic growth, like increased income for artisans. This is part of Sustainable Development Goal 8 (Goal 8). Hence, this study aims to investigate issues hindering construction artisan skills growth and suggest measures to improve construction artisan skills through mentorship mechanisms to achieve Goal 8.

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Design/methodology/approach – The study adopted a qualitative approach and collected data via oral interviews with knowledgeable participants. The participants were consultant experts in mentorship and Sustainable Development Goals (SDGs) matters, construction organisation management staffers and construction artisans in the Nigerian construction industry. The study covered Lagos and Abuja and achieved saturation at the 30th interviewee. Also, the research utilised a thematic method to analyse the collated data.
Findings – Enhanced knowledge sharing accelerates junior artisans' learning skills quickly, improving artisans' performance, ensuring sustainability of the skills learned (knowledge retention), encouraging collaboration, building the next generation of leaders and transitioning of experience to mentees emerged as mentorship's role in developing construction artisans' skills. Findings show that mentorship mechanisms to develop construction artisan skills face encumbrances. The perceived 32 encumbrances were re-clustered into mentee, mentor and government-related encumbrances. Also, achieving Goal 8 regarding construction artisans may be threatened if these issues are not checked. Thus, the study recommended measures improving construction artisan skills through mentorship mechanisms to achieve Goal 8.
Originality/value – Identifying the major encumbrances facing construction artisan skills improvement through mentorship would be useful to advocate measures to improve construction artisan's skills to achieve Goal 8.

Keywords Artisan, Encumbrance, Monitoring, Nigeria, Skills development, Sustainable development goal
Paper type Research paper

1. Introduction

The peculiarity of the construction industry makes mentorship pertinent, especially in developing countries. Ksiazek-Nowak *et al.* (2022) described mentorship as supporting individuals who want to transform ideas into missions and create an effort to accomplish it. The historical background of the mentor–mentee relationship is as old as human civilisations. Adeyemi and Oke (2022) identified reduced staffer turnover and staffer development, knowledge retention in firms, job satisfaction, increased pay and promotion as positive outcomes linked with mentoring. Mentoring is vital to skills and practical knowledge learned from a mentor–mentee relationship (Sospeter *et al.*, 2022). The mechanism provides important advantages not only to persons but also to the firm that uses it. At the professional level, it is agreed that mentoring is pertinent to leadership proficiency (Oke and Otasowie, 2020). It can be accomplished using informal and formal platforms to develop knowledge and skills within a firm. The informal approach is a natural relationship in the workplace, family activities, professional and social (Inzer and Crawford, 2005; Sospeter *et al.*, 2022). The formal approach encompasses a structured system comprising guidelines that help the mentor and mentee to fulfil the programme's goal. Inzer and Crawford (2005) and Oke *et al.* (2016) affirmed that a firm is expected to develop a programme or framework and process for monitoring in a formal setting.

Within the construction field workers' context, mentoring has many advantages for artisans, including the organisation. For this study, an artisan is a skilled worker/staffer who practices a trade or craft like masonry, concreting, carpentry, steel fixing, painting, plumbing, etc. in the construction industry. Mentoring relationships have been discovered in relevant literature within and outside construction to offer vital professional and personal growth prospects throughout a person's career (Thomas *et al.*, 2007; Oke *et al.*, 2016). It is a challenging job for someone starting in a specific trade career to assemble several skills acquired from work experience. This argument implies that although artisan mentoring is there, encumbrances exist. Despite the advantages of skilled artisans mentoring firms and individuals, there is a paucity of knowledge regarding the role in improving Nigerian construction artisans' skills and encumbrances facing construction artisan skills improvement through mentorship. Scholars (Afolabi *et al.*, 2019; Adeyemi and Oke, 2022; Ojelabi and Nnebue, 2022) have researched mentorship in the construction industry and related areas. Besides the issue still needs to be solved, especially in developing countries, such as Nigeria, none (Afolabi *et al.*, 2019; Adeyemi and Oke, 2022) addressed how improving construction artisans' skills through mentorship mechanisms might improve achieving Goal

8. Afolabi *et al.* (2019) examined how mentorship can improve women's careers in the construction industry. Adeyemi and Oke (2022) found the experience of mentor and mentee, attitudes (mentors and mentees'), supportive learning environment and educational background as the major issues affecting mentoring of Quantity Surveyors. Ojelabi and Nnebue (2022) studied hindrances facing female construction professionals' mentorship in Nigeria. Others are mentoring practices (Oke and Otasowie, 2020), advantages of mentoring to a firm, mentee and mentor (Mohtady *et al.*, 2019) and role models, mentors and observed differences (Thevenin *et al.*, 2016). As identified from existing literature, the paucity of studies on issues hindering construction artisan skills growth and suggesting measures to improve construction artisan skills through mentorship mechanisms to achieve Goal 8 motivated this study. Hence, the study aims to investigate issues hindering construction artisan skills growth and suggest measures to improve construction artisan's skills development through mentorship mechanisms to achieve Goal 8 via the following objectives:

(1) To assess mentorship role in improving Nigerian construction artisans' skills.

(2) To investigate encumbrances facing construction artisan skills improvement through mentorship.

(3) To suggest measures to improve construction artisan skills through mentorship mechanisms to achieve Goal 8.

2. Review of literature

2.1 Mentoring artisans in the construction industry

The construction industry is fragmented and complex. It comprises several stakeholders and projects of various sizes (Sospeter *et al.*, 2020). The paucity of artisans in some construction trades and transitioning of the experience of the few for sustainability calls for concern (Ebekozien *et al.*, 2021, 2023a, b). Nkomo and Thwala (2013) affirmed that a lack of mentoring in the industry is a weakness to progress and growth, especially for junior artisans and intending artisans. Mentoring is a vital element within mechanisms for working with young adults. It has become a feature of social policy (Nkomo and Thwala, 2013). Mentoring is about teaching and transferring knowledge or skills to others (Afolabi *et al.*, 2019).

Mentoring is vital in all industries, including the construction industry (Rogers, 2007). The threats of skilled staffers' paucity in some trades make mentoring germane to the construction industry. The uniqueness of the industry encourages mentorship because there are instances some projects last for a few years. Hoffmeister *et al.* (2011) identified two areas for developing mentoring relationships on construction projects. First, the artisan staffers are mentored by experienced artisan staffers. Senior artisans work with apprentices to assist them becomes training in the specific trade (skills). The mentor (skilled artisan) is overseen by experienced worker who is a foreman (Rogers, 2007; Nkomo and Thwala, 2013). Construction artisanships are designated to work with different artisans during site operations. However, scholars (Milner and Bossers, 2004; Smith *et al.*, 2005) acknowledged supportive, knowledgeable, sharing/giving and having a good attitude as the key attributes of a desirable mentor. In the industry, mentor's attributes can be more propounding with peer mentoring because of the industry's uniqueness. In the industry context, the artisans supervise the trainees and the foremen supervise the artisans. They view themselves as colleagues and friends to achieve the same task rather than in a hierarchy (Hoffmeister *et al.*, 2011; Nkomo and Thwala, 2013). Hence, peer mentoring can explore other mentors' attributes in the construction industry.

The mentee and the mentor should be prepared to play their roles to achieve the goal of mentorship. Achieving this set of goals requires a commitment to empowerment and skills transfer sustainability. There are challenges facing the process. Afolabi *et al.* (2019) identified an

inadequate supply of the right apprentices and mentors. They identified the internal and external factors but focused on women mentoring programmes in the construction industry. Sospeter *et al.* (2022) clustered the identified barriers to mentoring quantity surveying firm graduates into four groups. They are attitudinal, knowledge-related, personal and relational behaviour-related, mentoring relationship-related and multicultural and social injustice-related barriers.

2.2 Skills development for artisans to achieve Goal 8 via mentorship

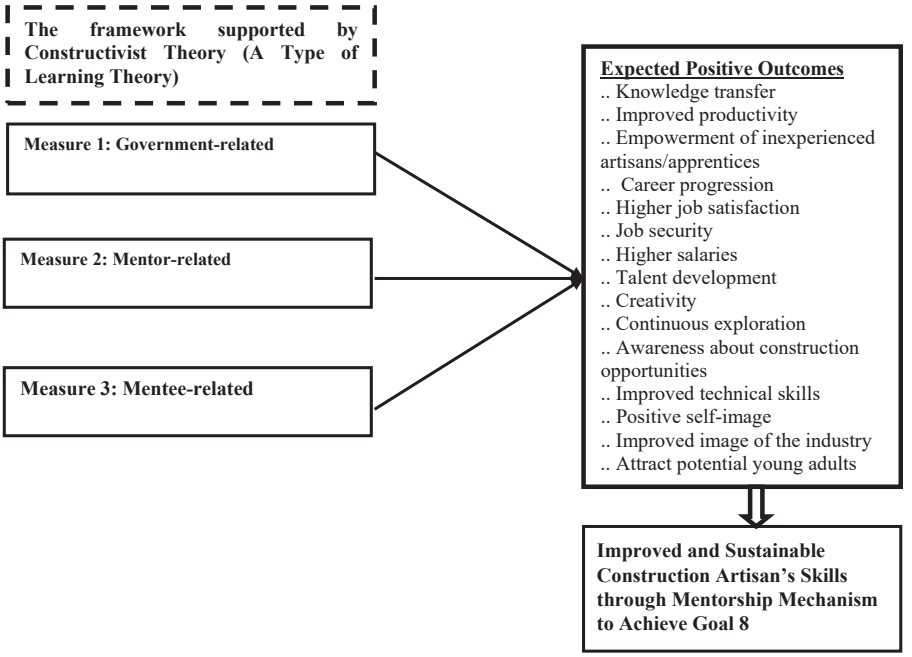
Construction and engineering projects are well-suited to address many issues associated with the United Nations 17 Sustainable Development Goals (Foss and Liu, 2022), including Goal 8 (decent work and economic growth). This is because the sector is project-based and requires skills in problem-elucidating, construction engineering and mentorship. Skills development via mentorship can offer sustainable economic growth for society. The UN Sustainable Development Agenda (2030) comprises 17 Goals, 169 targets and 230 indicators to achieve a better and more sustainable future (Guandalini *et al.*, 2019) and was ratified in 2015 by 193 member states. Mentorship in the skills development of construction artisans via Goal 8 (Decent Work and Economic Growth) is a vital goal and the study's focus. Goal 8 is pertinent to mentorship and sustainable economic growth. It would improve progressively in a safe and secure working environment for all workers via education and training (skilled) and reduce the proportion of youth unemployment, especially in developing countries with high levels of poverty. Goal 8 in this context is linked to Goals 1 (end poverty) and 2 (end hunger).

The three critical variables that make up Goal 8 are decent work, economic growth and productive employment (Perks and McQuiken, 2020). Economic growth is described as per capital, at least 7% GDP growth per annum in developing countries (Ritchie and Ortiz-Ospina, 2018). Productive employment is described as jobs producing returns to labour to permit staffers and their wards to consume above the poverty line (International Labour Organisation [ILO], 2012). This is germane to Goal 8. Decent work is described as a prospect for a person to get productive employment and deliver "living income," safety in the working environment and social protection for households to enhance social integration (UN, 2018). Accomplishing Goal 8 may demand an effective mentor and mentee relationship. Frey (2017) emphasised that Goal 8 applies to full employment and decent work. This is the primary mission of mentorship. The goal has 12 targets (Rai *et al.*, 2019). These rights are not human rights responsibilities of states but are benefits of economic growth. The target includes young adult jobs and the World Employment Pact of the International Labour Organisation (UN, 2015). Rai *et al.* (2019) asserted that Goal 8 builds on the ILO's Decent Work agenda with its four core standards.

3. Theoretical framework

Mentoring studies are structured around three main theoretical frameworks: social, learning and developmental (Dominguez and Hager, 2013). Constructivist theory, a type of learning theories, supports the proposed framework other learning theories in practice include transformative learning, action learning, cognitivist, behaviourist and adult learning. Learning theories emphasise the behavioural approaches a mentee utilises to facilitate personal improvement. Thus, mentoring is a learning partnership (Allen *et al.*, 2003). Constructivist Theory magnifies cognitive mechanisms to meaning-making and is built on knowledge and skills accumulated through experience (Mullen, 2000). Driscoll (2000) asserted that learning happens when real-world experience is compared to past frames of reference and knowledge is reconstructed. This theory supports the framework because it allows mentees to learn and develop self-awareness and confidence (Baker and Lattuca, 2010), as presented in Figure 1.

Figure 1 shows that the mentor's role is defined as a facilitator and offers the mentee observable plans of acceptable behaviours in the preferred work trade or firm by modelling



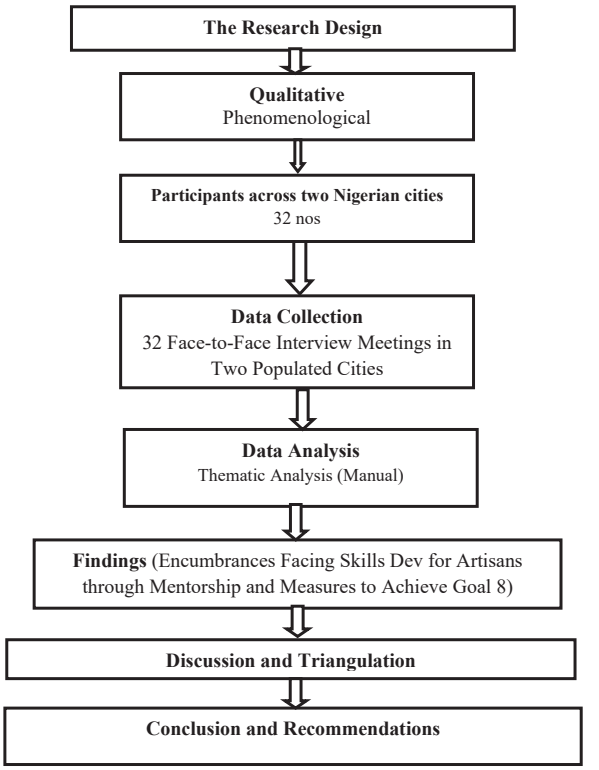
Source(s): Authors' work

Figure 1.
Proposed framework to improve construction artisan's skills through mentorship mechanism to achieve Goal 8

desirable skills and competencies throughout the duration. Also, the mentee is an active co-constructor during the learning and growth phases (Dominguez and Hager, 2013). Besides promoting sustainable economic growth, Figure 1 supports Target 8.1 (sustain per capita economic growth), Target 8.2 achieve higher levels of economic productivity through technological innovation), Target 8.3 (promote decent job creation), Target 8.5 (promote equal pay for work of equal value), Target 8.6 (reduce youth unemployment through education and training) and Target 8.8 (promote safe and secure working environments for artisans). The theory supports the framework because it reflects the conventional master–apprentice relationship. It is all about coaching, teaching, guiding and role modelling the mentee to achieve decent work and economic growth for the mentee. Possible positive outcomes include knowledge transfer, improved productivity, empowerment of inexperienced artisans, career progression, higher job satisfaction, job security, talent development, creativity, continuous exploration, awareness about construction opportunities and improved technical skills. To achieve these benefits, hindrances will need to be addressed. Hence, there is a need to improve construction artisan skills through mentorship to achieve Goal 8.

4. Research method

This research employed a phenomenology method. This is in line with Ibrahim *et al.* (2022). They affirmed that the method is considered exploratory through participants' data collection with experience in the subject area as applicable to this study. It is a type of qualitative approach. Qualitative research design addresses the complexity of sizable scale established alteration (Jaafar *et al.*, 2021). The study employed semi-structured face-to-face interviews and was complemented by reviewed literature. Semi-structured interviews allow the researchers to probe free responses from the interviewees on their experience within the study's context



Source(s): Modified from Ebekozien (2019)

Figure 2.
The research design

(Ebekozien, 2019). Figure 2 presents the study's research design method. The research adopted a convenient sampling method. Creswell and Creswell (2018) described the convenient sampling method as a non-probability sampling method where units/participants are selected for inclusion in the sample. The study's participants include consultant skill experts knowledgeable in SDGs and mentorship matters, construction consultants, construction firms' representatives providing mentorship programmes, skilled artisans and apprentices (trade trainees). This study engaged bricklaying and masonry, carpentry, painting and decoration, plumbing, building electrical work, tiling work, iron bending and aluminium windows/doors trades for wider coverage. About 32 interviewees willingly participated and saturation was achieved with the 30th interviewee. The interviewees were selected from eight construction firms (P1–P24) (comprises companies management representatives, trainers/artisans and trainees), construction consultants (P25–P28) and construction skills consultants knowledgeable in SDGs and mentorship matters (P29–P32), as illustrated in Table 1. The interviewees were from Lagos and Abuja. These cities are the hallmark of Nigerian construction activities (Ebekozien and Aigbavoba, 2021). The interviewees' location ranks, years of experience and staff strength are presented in Table 1. Besides the eight trainees, the least participants' years of experience was 13 years. The study's main question is: what is the role of mentorship in the skills development of construction artisans to achieve sustainable development Goal 8? Refer to Appendix for details. The researchers conducted a pilot interview with five interviewees. The interviews were from November 2022 to February 2023. This is a portion of an ongoing study.

ID	Company	Firm code	Location	Number of employees	Years of experience	Participant rank
P1	Construction firm (Large)	A	Abuja	350	25	Project manager
P2					20	Foreman
P3					2	Trainee (Masonry)
P4		B		400	18	Management staff
P5					22	Supervisor
P6					3	Trainee (Carpentry)
P7	Construction firm (Medium)	C		65	25	Managing director
P8					18	Coordinator
P9					3	Senior trainee
P10		D		70	22	Site manager
P11					17	Headman
P12					2	Trainee (Iron bending)
P13	Construction firm (Large)	E	Lagos	330	22	Management staff
P14					18	Supervisor
P15					3	Trainee (Plumbing)
P16		F		300	20	Contract manager
P17					24	Supervisor
P18					2	Trainee (Electrical)
P19	Construction firm (Medium)	G		60	29	CEO
P20					13	Headman
P21					3	Head trainee (Masonry)
P22		H		55	33	Management staff
P23					13	Supervisor
P24					3	Trainee (Masonry)
P25	Construction consultants		Lagos		34	Principal partner/ QS firm
P26					28	Director/ Architectural firm
P27			Abuja		20	Senior engineer
P28					24	Partner/Structural firm
P29	Construction skills consultants		Lagos		15	Head, Training unit
P30					20	Operation manager
P31			Abuja		18	Skills coordinator
P32					22	Partner, Skill manager

Source(s): Authors' work

Table 1. Interviewees' description

The researchers sent invitation letters to interviewees, and 32 participants were interviewed. The interview lasted 40 min on average. Regarding ethical issues, the participants were communicated with the aim and accepted to partake without coercion. The interviewees' identities were anonymous in the reporting for ethical reasons. This aligned with Aigbavboa *et al.* (2023a). The study assigned codes to the analysed data and utilised the open coding approach adopted for the transcript. The researchers employed themeing, invivo, narrative and emotion coding methods. This aligns with Corbin and Strauss (2015). About 74 codes were identified and re-assembled based on frequency, occurrence and reference. Around 12 sub-themes emerged from the 74 codes and were reassembled into three main themes.

The study triangulated the collected data and aligned with Aigbavboa *et al.* (2023b). The fears of the findings' validity were reduced and made possible through data collection triangulation (Ebekozien, 2020). To enhance the study's validation, the research design, data collection and post-data analysis were guided, as illustrated in Table 2. Also, the researchers adopted researcher reflexivity, member checking and triangulation as the validity methods of the collected data. The researchers utilised a manual method through thematic analysis to analyse the collated data and were guided by prepared semi-structured questions, as presented in Appendix. This aligns with Ebekozien *et al.* (2020, 2023). The main results were based on the views of the 32 interviewees.

5. Results and discussion of the study

5.1 Theme One: mentorship role in improving Nigerian construction artisans' skills

Theme One addresses Objective One; thus, mentorship roles in improving Nigerian construction artisans' skills cannot be overemphasised. Mentoring occurs at all professional levels, but this study focused on a developing country's construction artisans, using Nigeria as a case study. Transitioning skilled construction artisans' experience via mentoring to enhance sustainability has become pertinent. This is because skilled artisans' paucity threatens to achieve decent work and economic growth (Sustainable Development Goal 8). Mentorship is progressively receiving attention in the construction industry. This is because of some trades' skilled/experienced staff shortage. This includes carpentry, masonry, plumbing and steel fixing trades. Participant P29 says, " . . .. *The essence is to build the next generation (bridging the gap between generations) of skilled and experienced workers for company leadership positions. Also, it provides a platform to ensure that new staffers are well-trained in workplace with the relevant skills* . . .." Findings agree with Nkomo and Thwala (2013). They found that engineering and construction skills shortages are factual and threaten growth. Thus, the need for company managers to embrace a mentorship mechanism to support career development and learning via the training of apprentices in the organisation. Findings agree that besides immediate assistance and solving pressing problems of the mentees, mentorship is required in construction artisanship to enhance accelerating junior artisans or apprentices learning skills quickly, improving the artisan's performance, sustainability of the skills learned (knowledge retention) and transitioning experience to mentees. Findings agree with Carruthers (2022) and Adeyemi and Oke (2022). Carruthers (2022) identified 15 roles mentorship plays in the workplace if well managed. This includes building the next generation of leaders, improving the firm's performance, transferring knowledge, encouraging collaboration, accelerating staffers' skills development and increasing employee engagement. Adeyemi and Oke (2022) found reduced staffer

Table 2.
The study's quality assessment strategies

Method	Assessment strategies	The phase of research
Reliability	Participants' well-guided (consistent)	Data collection
Validity	The adoption of a recognised approach (semi-structured face-to-face interviews)	Data collection
Generalisability	Recognition of limitation due to sample size potential participant bias	Data analysis
Transferability	Compare the study's implications against reviewed literature	Post data analysis
Credibility	Theme approach to establish a pattern from the data	Data analysis
Dependability	Developing semi-structured interview guidelines (Appendix)	Research design

Source(s): Modified from Wearing (2013, p. 98) and Yin (2014, p. 34)

turnover and staffer development, knowledge retention in firms, job satisfaction, increased pay and promotion as many positive outcomes linked with mentoring.

Mentorship role in improving Nigerian construction artisans' skills cannot be overemphasised. Findings agree that it will enforce staff training, promote diversity, support career development, increase staffer retention and develop potential staffers that nurture talent (majority). Participant P32 says, " …. *it offers longer-term support and guidance. It is a giving/receiving relationship for the parties involved. The mentors could demonstrate commitment to developing people within their careers, and the mentees can work with more experienced or knowledgeable persons who offer continued career and professional development for the mentees' growth* …." Findings show that besides strengthening leadership, interpersonal and coaching skills in the mentor/mentee relationship in construction workers, the mechanism promotes learning objectives with the right enabling environment for the mentee to explore capabilities needed for future opportunities (P1, P4, P7, P13, P17, P25, P30 and P32). Participants P26, P28 and P31 opine that mentorship of construction artisans or apprentices should be tied to skills and knowledge transfer for professional development and career sustainability. This is germane to improving construction artisans' skills and mitigates threats to career sustainability, especially in carpentry, masonry, plumbing and steel fixing trades. Participant P15 . . . says, " …. *.mentorship is key because as an artisan, you will likely benefit from mentorship in your career journey and the prospect of being retained to a leadership position because of the skills learned. A good mentor advances the mentee's career, overseeing a mentee's success and growth* …" Transferring knowledge to junior artisans or apprentices is a way to help organisations prevent future crises. Thus, efficient mentorship brings purpose and satisfaction and increases workers' engagement because of the connections and feelings of belonging (P3, P9, P16 and P24).

In summary, mentorship is germane to improving Nigerian construction artisans' skills in various areas and, by extension, improving artisans' (employees') performance to increase the production and revenue of the company. This includes building the next artisans' generation (bridging the gap between generations) via knowledge sharing with apprentices or junior artisans, creating more all-inclusive collaborative cultures, developing diverse talent and breaking hindrances to understanding and respect for each other. Also, it accelerates junior artisans' or apprentices' learning skills faster, easily replaces skilled vacancies from the mentorship programmes and encourages collaboration that improves organisational performance. Lastly, mentorship mechanisms in the construction industry will increase workers' engagement, improve the firm's productivity and create a platform for knowledge transfer to mitigate future company failures.

5.2 Theme two: encumbrances facing construction artisan skills improvement through mentorship

Besides the benefits of mentorship to construction artisan skills improvement, there is laxly embracing of the mechanism, especially among the artisans for skills development in most companies in Nigeria. This study reveals that gaining insights into the perceived encumbrances facing construction artisan skills improvement can assist in developing measures for improving skills development for artisans to achieve Goal 8 (majority). One pertinent point is the re-cluster of the encumbrances into government-related, mentor-related and mentee-related, as illustrated in Table 3. The study identified 32 encumbrances. From the 32 encumbrances, 23 were mentor-related, 18 were mentee-related and nine were government-related. Findings disagree with Sospeter *et al.* (2022) regarding the re-clustered encumbrances. They re-clustered theirs: attitudinal and knowledge-related, personal and relational behaviour-related, mentoring relationship-related and multicultural and social

S/ Nos	Emerged encumbrances	Categorisation Govt-related	Mentor-related	Mentee-related
1	Time for the mentorship programme	√	✓	√
2	Funding issues	√	✓	
3	Absence of a supportive learning environment	√	✓	
4	Inadequate operational capacity by construction firms		✓	
5	Contracting firms' reluctance to invest in a mentorship programme		✓	
6	Educational background of mentees		√	√
7	Conflict of interest between mentor/mentee		✓	√
8	Narrow skills demotivate mentees			√
9	Lack of mindset			✓
10	The attitude of fast/quick wealth rather than career progression (get rich quick orientation)			√
11	Short construction project duration		✓	
12	Inadequate job prospect	✓	✓	
13	Lack of mentoring programmes	✓	✓	
14	Poor mentoring experience		√	
15	Inadequate training facilities and resources	√	✓	
16	High workload/stress		✓	√
17	Lack of clear framework for progression		✓	
18	Poor communication/knowledge sharing		✓	✓
19	Peer pressure			✓
20	Lax government support (government does not encourage skills acquisition)	√		
21	Poor management of the construction industry	√	√	
22	Poor goal-setting techniques		√	√
23	Poor motivation		√	√
24	Mentee socioeconomic status			√
25	Negative perception			√
26	Third-party undue influence			√
27	Working environment		√	√
28	Opportunity for career advancement		√	
29	Family pressures from mentee			√
30	Job security		√	√
31	Mode of training		√	√
32	Unfriendly working condition	√	√	
	Total	9	23	18

Source(s): Authors' work

Table 3.
Major encumbrances facing construction artisan skills improvement through mentorship

injustice-related barriers. The geographical location (Tanzania) and focused participants (quantity surveying firms) contributed to the difference in the barriers and re-grouping. Table 3 shows that some encumbrances are dual. For example, time for the mentorship programme, funding issues, absence of a supportive learning environment, conflict of interest between the mentor and the mentee and mode of training.

Concerning government-related encumbrances, funding issues, absence of a supportive learning environment, inadequate job prospects, lack of mentoring programmes and poor industry management emerged as top-ranked. Participant P29 says, " . . .. *Expecting high-ranked politicians that are good in blaming previous administrations for the calamities affecting Nigeria's issues, including increasing unemployment, to address issues such as creating an enabling environment for construction companies to embrace mentorship and, by extension, reducing unemployment, is likely to impracticality* . . .." Findings agree with

Abba (2019), who reported how Former President Buhari blames past administrations for the nation's economic woes yet ruled for eight years with no evidence of a full-capacity functioning crude oil refinery. Findings reveal that the absence of a functional advisory agency/department/ministry of the government to coordinate mentoring programmes in organisation has compounded the issues and increased the negative attitudes of some construction companies (majority). Participant P4 says, " . . .. *will you spend your resources to train a young artisan or apprentice skills when you are sure the worker would retain the job after the training? Moreover, no blueprint from the government to enforce legal action for defaulters* . . ." Results align with Daniel *et al.* (2020). It was discovered that companies are unwilling to invest in staff skills development because they cannot control staffers' job decisions.

For the mentor-related encumbrances, absence of a supportive learning environment, funding issues, lack of mentoring programme, inadequate job prospects, conflict of interest between the mentor and the mentee, educational background of the mentee, working environment and poor goal-setting techniques emerged top-ranked. For others, refer to Table 2. Participant P28 says, " . . . *.how many construction companies can engage young adults that could not further to higher institutions as apprentices with pay and commence training in a specific construction trade? I doubt that Nigeria's situation and the government are not helping matters with multiple taxes* . . .." Findings agree with Adeyemi and Oke (2022). They found an absence of a supportive learning environment and educational background as the major issues affecting mentoring of professionals in the industry, but not from the artisans' perspective.

Regarding mentee-related encumbrances, time for the mentorship programme, educational background of mentees, lack of mindset, the attitude of fast/quick wealth, poor motivation, job security and peer pressure emerged top-ranked. For others, refer to Table 2. Participant P23 says, " . . .. *majority of our young adults are looking for a quicker way to make money, thus, venture into 'Yahoo-Yahoo' (cybercrime). Unfortunately, a portion of society has openly embraced the illicit approach. This is where we find ourselves. They prefer to go for the Yahoo-Yahoo training rather than pick up a trade as an apprentice in the construction industry* . . ." Peer pressure and the poor sector image contribute to the reason many young adults are not interested in picking a career in one of the construction trades. Findings agree with Bilau *et al.* (2015) and Afolabi *et al.* (2019). Bilau *et al.* (2015) found lax motivation, formal education attraction, inadequate training opportunities and lax career guidance as encumbrances facing construction apprenticeship. Apprenticeship and mentorship have a link. Thus, some hindrances could affect both training mechanisms. Afolabi *et al.* (2019) found inadequate mentoring training, peer pressure, negative perception and poor image of the industry as encumbrances facing mentorship of women construction workers.

5.3 Theme three: measures to improve construction artisan's skills through mentorship mechanism to achieve Goal 8

This sub-section presents measures to improve construction artisans' skills through mentorship mechanisms to achieve Goal 8. It has become germane to meet the demands of the changing labour trends and bridge the skills gap. The research shows that artisans' skills development via effective mentorship can offer all-inclusive economic growth and decent jobs for the people and society. Stakeholders' role is germane to achieving this set goal (majority). Findings show that achieving Goal 8 is relatable and implies improved productivity, career progression, higher job satisfaction, reduced stress, job security, knowledge transfer and an improved construction industry image (Afolabi *et al.*, 2019). Findings clustered the measures into three variables to achieve Goal 8. They are government,

mentors and mentees measures, as illustrated in Table 4. Results indicate that these measures could improve artisans' skills development via effective mentorship mechanisms to achieve Goal 8. This is part of the study's motivation. Also, stakeholders' integrated and effective mentorship would yield positive outcomes to achieve Goal 8.

5.3.1 Government measures. The government role in skills development for construction artisans' skills through mentorship mechanisms to achieve Goal 8 cannot be over-elaborated. " . . .. *Majority of the vocational and technical education institutions in Nigeria are theory-based with little funding to manage the institutions. We need joint vocational education and training institutions that will be industry and theoretical-based* . . .." said Participant P31. Findings agree with Anudo and Awuor (2020). They affirmed that improved technical and vocational education and training institutions could meet the demands of the changing labour trends, including the skills gap. The majority of the vocational and technical institutions in Nigeria are likely to be basic education centres without basic facilities for practical (majority). Participants P4, P5, P12, P23 and P29 opine that the Federal Government N-Power was selective and hijacked by a few politicians for their selfish interests. The aim (to address youth unemployment and artisans' skills shortage) was defeated. Providing more opportunities and an enabling environment via policies and programmes for young adults to be engaged legitimately is a responsible government's sole responsibility (P3, P16, P23 and P30). Findings agree with Holt *et al.* (2023). They recommended that the government should enhance education and provide more mentorship opportunities for young adults. Besides construction companies doing the needful, the government should provide a supportive learning environment for mentoring construction artisans to thrive. This is pertinent because a supportive learning environment influences successful mentoring programmes and skills

Table 4.
Measures to improve construction artisan's skills through mentorship mechanism to achieve Goal 8

Categorisation Government measures	Mentors' measures	Mentees' measures
Contribute to mentorship training programme fund	Contribute to the mentorship training programme fund	Embrace mentorship to improve skills and knowledge in a specific trade
Feasible policy and regulatory framework	Provide enabling environment and resources for the training	Embrace the job opportunity and knowledge sharing to progress in your career
Provide a supportive learning environment via policies and programmes	Political will and commitment	Drop negative attitudes and focus on the mentor and mentee relationship
Political will and commitment	Company's mentorship policy scheme	Support the mechanism to succeed
Encourage mentorship programme in every awarded public contract	Mentorship awareness benefits via sensitisation	Mentorship awareness benefits via sensitisation
Mentorship awareness benefits via sensitisation	Mentorship training programme as a social partnership (bridging the gap between generations)	Collaboration with employers to achieve the main aim
Provision of incentives to companies that practice mentorship	Provision of stipends for mentees and expose them to leadership positions	
Collaboration with stakeholders	Collaboration with stakeholders	
Establish functional vocational and technical institutions across the country	Introduce a work-based learning mentoring mechanism	

Source(s): Authors' work

sustainability. Findings agree with Adeyemi and Oke (2022). They recommended that the appropriate authorities should provide a supportive learning environment. For other measures from the government to improve skills development for artisans through mentorship mechanisms to achieve Goal 8, refer to Table 4. These measures would assist in promoting development-oriented policies that will support productive tasks in the industry and create a high-value-added and labour-intensive sector to boast the economy and increase employment for all.

5.3.2 Mentor's measures. Construction companies and their training representative (mentor) roles in artisan's skills development through mentorship mechanisms to achieve Goal 8 and its targets cannot be overemphasised. Participants agree that the construction companies have the most responsibilities besides the government's institutional policies and programmes to create an enabling environment, including mentorship drives (majority). The era of profit drive without investing in staff to bridge future skills gaps should be discouraged among top organisation directors (P28 and P32). " . . .. *construction companies should have mentorship policy mission statement. This is germane to bridge future ageing artisan skills and create employment for the young adults willing to contribute to humanity* . . .." said Participant P17. Sensitisation from primary to secondary schools should be done intensively, right from the grassroots to cities. This exercise should be all-inclusive and might improve the relationship between academia and the workplace (P2, P12, P24 and P26). Findings agree with Anudo and Awuor (2020). They suggested more sensitisation on embracing technical and vocational education and training programmes for sustainable development. This is how to sustain skills and knowledge transfer (majority). Organisational management should define the career progression from apprentice to artisan to headman to general foreman and so on to give a sense of belonging and hope for the best (P23). This is a motivating strategy to enhance commitment to the mentorship training programme (majority). Findings agree with Holt *et al.* (2023). They recommended that companies should expose young adults to the industry and involve them in leadership positions. Findings agree with Adeyemi and Oke (2022). They suggested appropriate matching of mentor and mentee to prevent attitudes hindering mentoring programmes for junior artisans and apprentices. Findings suggest that construction companies should introduce work-based learning with mentor/mentee relationships and mentoring mechanisms (P28, P29 and P31). This should be targeted at trade interventions with skills gaps. Findings agree with Hartl (2009) and suggest introducing more work-based learning with mentors/mentees. For others, refer to Table 4. These measures would assist in developing an organisational institutional framework for sustainable mentorship of artisans via programmes and stakeholders' engagement to promote an enabling environment for productive activities.

5.3.3 Mentee's measures. Mentee has a role in the artisan's skills development through mentorship mechanisms to achieve Goal 8 and its targets. The influence of the mentees is critical to the success or failure of mentorship training programmes. Participant P2 says, " . . . *.the attitude and perception of many that construction trade skills are for the low-class or failures in the society is top of the top threats young adults are not interested in the trade. Many that started have migrated to 'yahoo-yahoo' (cyber-crime) because a larger portion of society respects and worships their illicit wealth. Can we continue this way?* . . .." Findings agree that besides job opportunities and knowledge sharing to progress in their career, mentees should embrace mentorship to improve skills and knowledge in specific trades and collaborate with other stakeholders to achieve Goal 8. Findings agree that mentees attitudes should be positive and focus on the mentorship training programme with all commitment (majority). Findings agree with Daniel *et al.* (2020), Odell *et al.* (2020) and Adeyemi and Oke (2022). Daniel *et al.* (2020) recommended funding construction artisan mentorship training programmes should not be a government duty alone. It should be all-inclusive. Odell *et al.* (2020) emphasised that transformative actions should be taken to address the

unsustainability of socioeconomic issues (such as peer pressure and family pressure from mentees) that influence decision-making and practice. Adeyemi and Oke (2022) suggested suitable matching of mentee and mentor to prevent attitudes hindering mentoring programmes for junior artisans and apprentices. " . . . *if we must achieve sustainability of skills artisan for the future generations, craft-based training via mentorship is essential to enhance sustainable cities and communities and social collaboration* . . ." said P5. Findings agree with Lindsay *et al.* (2016). They asserted mentorship programmes might be effective for assisting young adults with secondary school education (vocational education) or employment. For others, refer to Table 4. These measures would assist in creating high-income job opportunities and improve the skills of artisans for better projection in their careers.

6. The research implications

Findings show that the construction artisan skills development via mentorship training programmes success has positive implications for humanity and society, especially in improving to achieve Goal 8. Goal 8 promotes sustained, inclusive, sustainable economic growth and productive employment to enhance decent work. Construction artisan skills development and sustainability via mentorship training programmes is one way to achieve this goal. Joblessness would be mitigated via the right construction artisan skill development and translate to service for economic growth and value. The outcome would enhance economic productivity and improve production efficiency.

6.1 The theoretical implication

This research investigated the perceived encumbrances that may hinder construction artisan skills development via mentorship training programmes. It proffered measures to improve construction artisan skills through mentorship to achieve Goal 8. Around 32 encumbrances emerged and were re-clustered into three groups, as shown in Table 3. Table 4 presents the abridged and re-clustered three groups' measures to achieve Goal 8 and its targets. Figure 1 shows the three main independent variables. This includes government-related measures, mentor-related and mentee-related measures. The dependent variable is improved and sustainable construction artisans' skills through mentorship mechanism training to achieve Goal 11. These are parts of the theoretical implications.

6.2 The research's practical implication

The study provides participants with platforms to proffer measures to improve skills development for construction artisans through mentorship mechanisms to achieve Goal 8. Also, improving to achieve Goal 8, other related SDGs, such as Goals 1 and 11, linked with construction artisans through mentorship mechanisms, will be achieved. This is germane to enhancing all-inclusive, sustainable economic advancement. Findings intend to encourage policymakers and construction companies' directors to inform other stakeholders regarding skills development for construction artisan's skills through mentorship mechanisms to achieve Goal 8. Hence, stakeholders are concerned about employment sustainability for young adults and creating safe working environments to promote a sustainable society. The study's results assist in understanding the encumbrances facing construction artisans' skills through mentorship mechanisms to achieve Goal 8. These are parts of the practice implications because the findings support the study's theory. The constructivist theory emphasises the behavioural approaches a mentee utilises to facilitate personal improvement. Thus, mentoring is a learning partnership (Allen *et al.*, 2003). Thus, the theory supports the findings because it reflects the conventional master-apprentice relationship. The findings are

all about coaching, teaching, guiding, and role modelling the mentee to achieve decent work and economic growth for the mentee. The measures, if implemented, would yield knowledge transfer, improved productivity, empowerment of inexperienced artisans, career progression, higher job satisfaction, job security, talent development, creativity, continuous exploration, awareness about construction opportunities and improved technical skills.

7. The research limitations and suggested study in the future

The research covered Lagos and Abuja, Nigeria. The in-depth literature review relieved these limitations and improved the findings' discussion. Concerning recommended future studies, the engaged study's mechanism could be used in other countries with encumbrances facing construction artisan's skills through mentorship mechanisms to achieve Goal 8. Also, the emerged items under the main variables (government, mentors and mentees measures) can be adopted in future studies as measurement items via a quantitative technique with wider coverage.

8. Conclusion and recommendations

The study aimed to investigate issues hindering construction artisan skills growth and suggest measures to improve construction artisan skills through mentorship mechanisms to achieve Goal 8. The study has shown that major partners have germane roles in construction artisan skills growth through mentorship mechanisms to achieve Goal 8. The research identified 32 perceived encumbrances and re-clustered them. This includes government-related, mentor-related and mentee-related encumbrances. Findings suggested achieving Goal 8 regarding construction artisans may be threatened if these issues are not checked. Thus, measures to improve construction artisans' skills through mentorship mechanisms to achieve Goal 8 were recommended, as concise in Table 4. Thus, the research suggested measures for improving construction artisan skills through mentorship to achieve Goal 8. The high point is to achieve Goal 8 via the following:

(1) The government's role is pertinent in skills development for construction artisans via mentorship mechanisms to achieve Goal 8. First, the government should develop pro-mentorship policies and programmes to encourage other stakeholders to participate in young adults' job creation drive. Thus, functional technical and vocational education and training institutions and collaboration with the industry should be established. The institution's management should be joint-driven to ensure the goal is achieved. It will enhance the artisan's skills development and bridge the existing skills gap. In principle, it will improve achieving Goal 8 because of enhanced job security, accelerating junior artisans' or apprentices' learning skills faster, increasing salaries and improving firm productivity.

(2) Construction companies should introduce more work-based learning with mentors/mentees relationships and provide continuous support and mentoring mechanisms to targeted trade interventions with skills gaps. This is long overdue because of multi-dimensional expected outcomes, including salary increases, job security, enhanced productivity and performance and knowledge sharing.

(3) Third, to ensure a construction junior artisans' or apprentices' mentorship programme that would improve achieving Goal 8, the prospective parties (mentor and mentee) should be committed to the set goals. Also, the mentor/trainer should demonstrate proficiency and commitment towards competency in the workplace.

(4) The study suggests developing and implementing programmes via providing more mentorship opportunities to encourage young adult construction junior artisans' or apprentices' involvement in leadership positions via an integrated institutional framework mentorship progression in their careers. This is pertinent for sustainable knowledge transfer and improves the achievement of Goal 8 and its targets.

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Appendix

Semi-structured interview questions

Dear Participant,

Request for Interview.

The paucity of artisans in some construction trades and transitioning of the experience of the few for sustainability calls for concern. Mentorship programmes offer a promising mechanism to support construction apprentices through those transitions. Mentorship may enhance artisan/apprentice decent work and economic growth (Sustainable Development Goal 8). Therefore, the paper's title is **Mentorship as a Tool for Improving Construction Artisan's Skills to Achieve Sustainable Development Goal 8 Via Qualitative Approach.** Specifically, the researchers will achieve the stated aim through the following:

(1) To assess mentorship role in improving Nigerian construction artisans' skills.

(2) To investigate encumbrances facing construction artisan skills improvement through mentorship.

(3) To suggest measures to improve construction artisan skills through mentorship mechanisms to achieve Goal 8.

Note that the interview questions will be within the stated objectives. Responses provided by you will be collated and analysed together with that of other interviewees. It will make up the value and contribution to achieving the success of this work. Information provided will be treated with the greatest secrecy.

Hence, your valuable time and other answers to the questions will be highly cherished.

With regards.

Yours faithfully,

(Research Coordinator)

BASIC QUESTIONS FOR THE PARTICIPANTS

(1) Please, for record purposes, what is your organisation's name and location?

(2) Please, what is your position in the organisation?

(3) Can you tell us your years of work experience?

(4) Please, are you knowledgeable regarding mentorship and Goal 8?

(5) If yes to Question 4, how can you describe the role of mentorship in developing Nigerian construction artisans' skills?

(6) As a stakeholder in the built environment sector, how can you evaluate the current construction mentorship practice?

(7) Do you think there are perceived encumbrances facing artisan skills development via mentorship mechanisms?

(8) If yes to Question 7, what are the possible encumbrances?

(9) If no to Question 7, why do you think so?

(10) Please, what role can key stakeholders (government, employers and employees) play to improve artisan skills through mentorship mechanisms to achieve Goal 8?

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