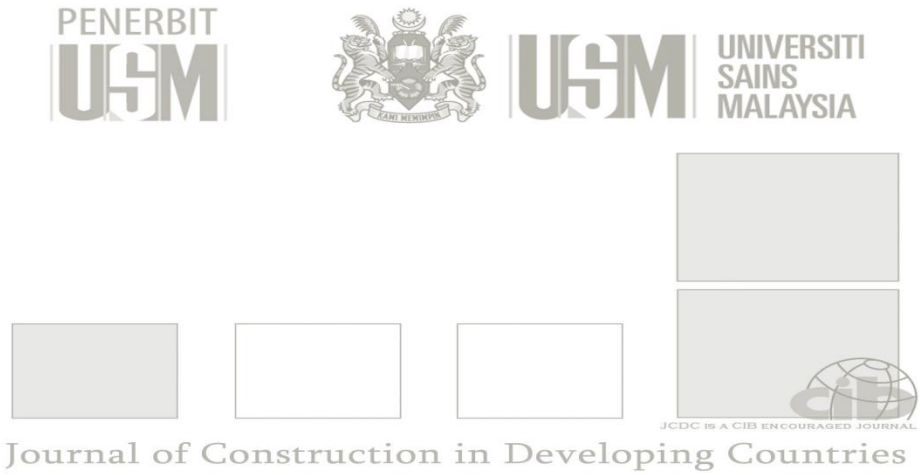

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Determinants of Successful Completion of Construction Craft Apprenticeship in Lagos State Nigeria: A Qualitative Study

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Abstract

Apprenticeships provide young people with training and improve the supply of workers to the construction sector. In Nigeria, there is a large influx of craftspeople from neighbouring countries. This situation has led to an increase in the rate of youth employment. The current study seeks to address the following questions: (i) what are the factors responsible for the non-completion of construction crafts apprenticeship? And (ii) what are the determinants of successful completion of construction crafts apprenticeship? Forty-six (46) semi-structured interviews were conducted with relevant stakeholders involved in apprenticeship in Lagos State, Nigeria. The study reveals that "lack of information on the content of training programme," "financial difficulties," "bullying," "lack of interest," and "work-life balance" as factors responsible for non-completion. In contrast, it was found that "personal interest and motivation," "parental and family support," "personality

of the trainer," and "potential to earn income" are determinants of successful completion of construction crafts apprenticeship. This finding can be used to develop strategies for improving outcomes of construction craftspeople apprenticeships. The study contributes to the knowledge on apprenticeships in the field of construction and vocational education.

Keywords: Apprenticeship, Completion, Construction craft, Lagos, Qualitative study

INTRODUCTION

The performance of construction projects has become a topical issue in the field of construction management. Studies have shown that the quantity and quality of the workforce influence the outcome of construction projects (Hughes and Thorpe, 2014; Fugar and Agyakwah-Baah, 2010). For instance, Hughes and Thorpe (2014) affirmed that the level of supervisor's competence and productivity are positively related. Increasing labour cost is a consequence of ageing and shortage of construction workforce (Karimi, Taylor and Goodrum, 2017; Veen, Teicher and Holland, 2017). Human resources influence the outcome of construction projects in terms of cost, quality, and time, among others. Thus, the long-term survival of the construction industry is dependent on its ability to maintain an adequate supply of workers.

Apprenticeship schemes recruit and train young people for work in the construction industry. At the end of the apprenticeship, it is expected that young people will have acquired the skills and competence to practice a

trade. Daniel et al. (2020) stated that the construction sector has invested in apprenticeship schemes in various countries. For instance, N-Power (N-Power, 2017) and Enhanced Construction Manpower Training Scheme (Ho, 2016) are examples of construction craftspeople apprenticeships in Nigeria and Hong Kong. Apprenticeships can potentially reduce youth unemployment by preparing young people for work in the construction sector.

The completion of apprenticeship programmes has been the focus of several empirical investigations. Currently, research has shown that the rate of non-completion of apprenticeship programmes is high (Daniel et al., 2019). Research shows that the rates of non-completion of construction crafts apprenticeship in Australia and England are 57% and 29%, respectively (Bednarz, 2014; Construction Industry Training Board, 2018). As a consequence of this non-completion, there is a need to expend additional money on recruiting and training more apprentices. This situation leads to the wastage of scarce economic resources, and it has an adverse effect on the construction sector. As stated in the systematic review on construction craftspeople apprenticeship, there are few published studies on non-completion of apprenticeships in the context of developing countries. Furthermore, there is no similar study in Lagos state, Nigeria. Understanding the causes of non-completion would facilitate the development of strategies for improving the outcomes of apprenticeship programs.

Based on the identified gaps in the existing knowledge, the study seeks to address two research questions: (i) what are the factors responsible for the

non-completion of construction crafts apprenticeship? And (ii) what are the determinants of successful completion of construction crafts apprenticeship? This study contributes to research on construction crafts apprenticeship in several ways. First, the study provides fresh insight into the underlying reasons for the non-completion of construction crafts apprenticeship within the context of a developing country, i.e., Lagos state, Nigeria. Second, the study provides evidence of valuable strategies for overcoming the underlying reasons for the non-completion of apprenticeship schemes in the construction sector.

LITERATURE REVIEW

The construction sector needs craftspeople to execute different stages of infrastructure projects. According to Wang et al. (2008), the industry is built on a foundation of skilled artisans that are mostly supplied through several sources of craft training, such as vocational-technical schools, firm-sponsored training, and apprenticeships. Daniel et al. (2020) stated that the recurring poor performance of construction projects could be linked to workforce shortages. Despite several apprenticeship programs, such as the Enhanced Construction Manpower Training Scheme (Ho, 2016), the average age of construction workers keeps increasing. For example, the average age of construction workers in the UK is 45 years (Office for National Statistics, 2018). There is a need to ensure a continuous supply of young workers through the various training schemes. The availability of craftspeople and young

apprentices is vital for the sustained and long-term growth of the construction sector.

The completion of apprenticeships plays a critical role in reducing the average age of construction workers. The completion rates of apprenticeship programs vary from one country to another. For instance, it was reported that the completion rates in Scotland, Germany, England, and Australia are 78%, 75%, 69%, and 53%, respectively (Greig, 2019). However, the completion rate in a developing country like Nigeria is unknown. The shortage and ageing of the workforce are similar characteristics shared between the construction sector of developing and developed countries. This similarity suggests that non-completion rates are comparable. For instance, the shortage of construction craftspeople has contributed to the increase in the number of migrant skilled workers in the Nigerian construction industry (Olatunde and Ogbu, 2018). This narrative provides evidence of the shortage of construction workers in Nigeria. Understanding the underlying reasons for non-completion is important for developing strategies for improving the supply of craftspeople to the construction sector.

Apprenticeship in Nigeria

The apprenticeship scheme has been in existence before the advent of the formal system of education in Nigeria. The apprenticeship system started in Nigeria as a family institution, as a means of promulgating the family's heritage, and supplying artisans for the various crafts (Lekan and Munta, 2008). Apprenticeship is one of the essential sources of labour supply in the

construction sector of Nigeria. According to Ogbuanya, Chukwu, and Orji (2020), apprenticeship is essential for poverty reduction, wellbeing improvement among youths, and employment generation in Nigeria.

In recognition of the significance of the apprenticeship system of labour supply, Industrial Training Fund (ITF) was established by the Federal Government of Nigeria, which led to the promulgation into law of a National Apprenticeship Scheme in 1982 (Lekan and Munta, 2008). A few decades after, the apprenticeship system was restructured to train personnel such as carpenters, masons, ironworkers, bricklayers, plumbers, welders, and electricians, among other artisans in the construction industry. This restructuring of the apprenticeship programme resulted in the N-Power programme (an example of construction craftspeople apprenticeship) organized by the Nigerian Institute of Building (NIOB) and sponsored by the Federal Government of Nigeria. N-power is a National Social Investment Programme of the Federal Government aimed particularly at youth empowerment and job creation through human capital development of the Nigerian labour force (Sambe, 2019). According to Ikediashi et al. (2012), apprenticeship programmes are more comprehensive training that combines on–the–job training with related classroom instruction and are available for plumbers, electricians, tilers, ironworkers, painters, carpenters, roofers, and other artisans.

In recent years, the Nigerian government and various stakeholders have been implementing policies to improve the outcomes of apprentices'

programmes in the construction sector. For instance, the Nigerian government implemented the N-Power program to provide the apprentice with fund support during the training period (N-Power, 2017). Also, private sector organizations and international partners are creating vocational training schools, such as the FOCI-JBN skills academy (Duku, 2020). These interventions would help to improve the supply of young craftspeople to replace the ageing construction workforce. However, it is important to introduce prospective trainees to the content of the training programmes via open days or interviews. This information would give prospective trainees adequate insights to decide to pursue the training for a particular trade. As more training schools are being set up, there is a need for regulatory agencies to ensure that (i) apprentices receive adequate training and (ii) no one is bullied or exploited during the training programmes. This standard can be achieved through inspections and accreditation of training programmes.

Apprenticeship has become an area of interest to few researchers in Nigeria in recent times. For instance, Ogbuanya, Chukwu, and Orji (2020) assess the apprenticeship system and labour supply of electrical installation artisans in Enugu State and found that strict obedience to rules, loyalty to the master trainer, demonstration of proficiency in the workplace, conformity to regulation, demonstration of competency to work, punctuality to work, commitment towards training, exposure work to opportunity after training and being in working relationship with the master trainer were that determinants of the rate of completion of apprentices. Liadi and Olutayo

(2017) examined whether the normative expectations among masons positively or negatively influence young people's interest in masonry and found out that the normative relations between masons and apprentices increase apprentices' anxiety. Lekan and Munta (2008) investigated the extent to which the traditional apprenticeship system has succeeded in supplying the required artisan for housing development in Saki, Oyo State, and found out that the existing building artisans were aging out and that the rate of enrolment as apprentices is fast dwindling at an average rate of 16% per annum. Lekan and Munta (2008) reported the reasons for the decline to include; the quest for overnight richness, preference for occupation with minor physical/mental ability requirements, perceived dirty nature of the occupation, and preference for occupation with daily benefits for the apprentice. Due to lack of previous work within the study area (Daniel et al., 2019), the present study utilized a qualitative research method to capture the issues concerning determinants of successful completion and barriers for non-completion of apprenticeship within the local context in Lagos state, Nigeria.

Determinants of Successful Completion of Apprenticeship

Across the globe, more recent attention has focused on the successful completion of craftspeople apprenticeship. According to Daniel et al. (2020), the successful completion of apprenticeships is a metric for assessing the cost-efficiency and sustainability of training programmes. A considerable number of studies have investigated the determinants of successful completion of construction craftspeople apprenticeship. Daniel et al. (2020)

revealed that the successful completion of construction craftspeople apprenticeship had been attributed to mentoring. Although it may be difficult to eliminate non-completion due to issues such as illness (Gambin, Hogarth, and Hasluck, 2011), the completion rates could be improved to facilitate the efficient use of training resources. A summary of the determinants of successful completion of construction crafts apprenticeship identified by different studies is summarised and presented in Table 1.

S/No	Determinants	Bursnall, Nafilyan, and Speckesser (2017)	Gambin, Hogarth, and Hasluck(2011)	Bilginsoy (2003)	Harris et al. (2001)	Smyth and Zimba (2019)	Coe (2013)	Bednarz (2014)	Greig (2019)	Gallacher et al. (2004)	Laporte and Mueller (2013)	TOTAL
1	The personal characteristics of the individual (e.g., age and gender)		✓					✓	✓			3
2	The nature of the apprenticeship (the particular framework and the level)	✓	✓	✓			✓		✓	✓	✓	7
3	The apprentice's knowledge of what is expected of them before they decided to become an apprentice	✓	✓		✓						✓	4
4	The characteristics of the employer (including sector, size, commitment, and tradition of apprenticeship)		✓						✓			2
5	The management of an apprenticeship by the employer and the training provider		✓			✓	✓			✓		4
6	Apprentices in joint programs			✓								1
7	Quality training in terms of receiving a broad range of skills and experience	✓			✓				✓	✓		4
8	Support and assistance to cope with changes in personal circumstances such as the need to leave home and live independently by the employer				✓	✓				✓		3
9	Continuing to love/like the type of work associated with the occupational area they are in				✓						✓	2
10	Good relationships/communication with employer/supervisor/training officer				✓					✓		2
11	Opportunity provided by off-the-job training to interact with peers				✓					✓	✓	3
12	Good working conditions (particularly regular hours, appropriate breaks and days off)				✓							1
13	Supportive family, networks, partner				✓							1
14	Having the value of their work recognised and appreciated by employers, supervisors, and work colleagues				✓	✓						2
15	Wage increases; receiving their correct entitlements (for example, being paid for overtime)				✓	✓				✓		3
16	Apprentice's/trainee's desire to do well, motivation, and/or determination to succeed against the odds				✓							1

17	Promise of future stable employment and more money			✓	✓					2
18	Accumulation of knowledge, skills, and experience which makes the work easier and/or leads to being given more interesting work and greater responsibility	✓		✓					✓	3
19	Variety and challenge in the work that they do			✓						1
20	Apprenticeship programmes for which certification is mandatory					✓				1
21	Higher levels of schooling	✓					✓			2
22	Location of training	✓					✓	✓	✓	4
23	A work culture in which training is prioritized and valued							✓		1
24	Regional unemployment rate								✓	1
25	Time in apprenticeship programs		✓						✓	2

Table 1. Determinant of successful completion of construction crafts apprenticeship

A total of 25 determinants responsible for successful completion of construction craftspeople apprenticeship were identified from previous research (Table 1). Several strategies are being implemented in different countries to sustain and improve completion rates based on these determinants. For instance, the payment of stipends to trainees during the training period (Smyth and Zimba, 2019). Also, active collaboration between employers and training providers has improved the employability of trainees (Garlich and Tesinsky, 2005). Studies informed these strategies into factors responsible for the non-completion of apprenticeship. Taken together, these studies provide insights into strategies for improving completion rates of apprenticeships.

Barriers for Non-completion of Apprenticeship

A large and growing number of studies have examined the causes of non-completion of construction craftspeople apprenticeship. A review of studies (Daniel et al., 2020) revealed that the amount of time required is the most

frequent reason for the non-completion of construction craftspeople apprenticeship. Other determinants of non-completion identified in previous studies include bullying, funding, and employability issues (Arkani et al., 2003; Riggall, Skues, and Wise, 2017). A summary of the determinant of non-completion of construction crafts apprenticeship identified by different studies is summarised and presented in Table 2.

S/No	Barriers	Donkor (2012)	Coe (2013)	Greig (2019)	Harris et al. (2001)	Snell and Hart (2008)	Harris and Simons (2005)	Gambin and Hogarth (2015)	Gallacher et al. (2004)	Laporte and Mueller (2013)
1	Financial hardships	✓								
2	Unsatisfactory treatment by the employer							✓		
3	Wrong career choice	✓								
4	Loss of interest in the trade	✓			✓					
5	Being treated as cheap labour or being exploited	✓			✓					
6	Low Wages (in their opinion, not being commensurate with the value of the work being done)				✓	✓		✓	✓	
7	Getting a new job	✓								
8	Bullying (Not getting on well with the boss or other people at the workplace)	✓			✓	✓				
9	Longer apprenticeship programmes		✓							✓
10	Element of mismatch between the ability and expectations of apprentices			✓						
11	Element of mismatch between the expectations and demands of employers			✓						
12	Pressures from family			✓						
13	Changes in personal circumstances such as getting pregnant, divorced, single individuals, the employer going out of business, needing to leave home and live independently				✓					✓
14	Poor quality or lack of on-the-job training (employers who do not meet their obligations in terms of training)		✓		✓	✓		✓	✓	
15	Poor quality off-the-job training in terms of its lack of relevance to their current workplace		✓		✓	✓	✓	✓	✓	
16	Lack of social life				✓					
17	Unpleasant working conditions, particularly long hours without appropriate breaks or days off, heavy workloads, occupational health and safety issues				✓	✓				
18	Work that is physically demanding, boring and/or repetitious				✓			✓		
19	Unpleasant working environment					✓		✓		
20	Failure to offer something new to the apprentice				✓		✓			
21	Lack of qualified trainers both about subject knowledge and capacity to train						✓			
22	Non-supportive workplace					✓			✓	
23	Lack of peer support								✓	
24	Lack of continuity in the practice of private training providers								✓	
25	Lack of good communication with training providers								✓	
26	Having an activity limitation									✓

27	Visible minorities		✓
28	Aboriginals		✓
29	Low education levels		✓
30	Local unemployment rates	✓	

Table 2. Barriers for non-completion of construction crafts apprenticeship

As stated earlier, the strategies for improving the outcomes of apprenticeship programmes are informed by previous research. The review presented in Table 2 indicates that a diversity of factors contribute to the non-completion of apprenticeship. Daniel et al. (2020) classified these determinants into two groups: internal and external. Internal factors are primarily within the direct control of internal stakeholders, i.e., apprentice, trainers, and training providers. Also, internal stakeholders have no control over external factors, such as unemployment. Many studies (see Table 2) agree on the importance of training, i.e., on-the-job and off-the-job. Taken together, training providers and employers must create symbiotic relationships to improve employability and completion rates. In all of the studies reviewed here, it is evident that apprenticeship completion is a topical issue within the construction sector.

RESEARCH METHOD

Many research approaches have been used to investigate problems in the field of construction education and related fields. The methods utilized in previous research range from quantitative, qualitative, and mixed-method (Bigelow, Saseendran, and Elliott, 2018; Daniel et al., 2019). Due to the knowledge gap, the qualitative research approach was adopted in the current study. Although there is a general preference for using quantitative methods among construction management research (Ejohwomu and

Oshodi, 2014; Ayodele, Chang-Richards and González, 2020), the suitability of a particular approach is dependent on the nature of the problem being investigated. Qualitative research methods have two main advantages: (i) suitability for exploring unknown problems (Creswell, 1998) and (ii) useful gathering evidence which may evade other research approaches (Babbie, 2014). Hence, a semi-structured interview, a qualitative research approach, was used to collect data in the current study. The research was conducted in Lagos state. Lagos was chosen because of the significant ongoing construction activities in the State.

The study was carried out in four distinct but interrelated stages. First, the study commenced with a review of the literature on the subject matter. The review was helpful in identifying the gaps in the current knowledge on construction crafts apprenticeship (Bryman, 2012). A systematic review of empirical studies on construction crafts apprenticeship indicates that very little research has focused on developing countries (Daniel et al., 2019). The literature review served two main purposes (i) justified the need for the study and (ii) provided the information needed to develop the survey instrument. Second, a semi-structured interview schedule was developed. Bryman (2012) stated that semi-structured interviews allowed participants to present their views on a particular subject freely. The analysis of this unstructured data helps gain deep and fresh insights.

Third, the interviewees were purposively selected. The criteria used for selecting interviewees are (i) participation in crafts apprenticeship

programmes and (ii) training was done within Lagos state, Nigeria. These criteria ensured that the data was collected from individuals who were apprentices at some point in the past and trainers and training providers. Table 3 provides descriptive statistics on the background information of the interviewees. The interviewees were selected from a broad background. This approach gives a holistic view of the construction craft apprenticeship programme. Before the interview, the purpose of the interviews was explained to the participants. Also, the interviewees' consent was sort to ensure that the sessions were tape-recorded. The face-to-face interviews were conducted at the interviewee's locations, for instance, construction sites. This environment was conducive, and the discussion was engaging. The interview questions centred on the following: (i) background of the interviewees, (ii) what influenced their decisions to learn a trade, and (iii) what are the underlying reasons for completion of the apprenticeship program or otherwise. Overall, 46 interviews were conducted by the research team. Data collected was stopped when data saturation was achieved.

S/N	Description of participant(s)	Number of interviewees
1	Craftspeople (completed the initial apprentice training)	27
2	Craftspeople (Did not complete the initial apprentice training)	13
3	Site supervisors (People who are involved in the monitoring of on-the-job training)	2
4	Tutors (Individuals who are involved in the delivery of in-class training to crafts apprentices)	2
5	Administrators (People involved in the administration of apprenticeship training)	2
	Total	**46**

Table 3. Descriptive statistics on interviewees

Data was collected from a face-face interview within five months between November 2019 and March 2020.The time spent during each interview section ranged between 35 and 60 minutes. Interview guides were developed for the study. The interview guide was pretested among selected experienced construction managers. This ensured that the questions were comparable and respondents could provide relevant information on the subject under study. The codes/themes were generated from the inductive approach, and the software used for the analysis was RQDA (Chandra and Shang, 2017).

Finally, the interview transcripts were transcribed. The interview transcripts were analyzed using an inductive approach and thematic analysis. The analysis was done by a member of the research team who has conducted qualitative data analysis. The other members of the research team were responsible for validating the themes emerging from the interview transcripts. Nowell et al. (2017) stated that internal validation improves the credibility of findings emerging from qualitative research. The themes, which emerged from the analysis, are presented in the next section of the paper.

RESULTS AND DISCUSSION

Interviewee's Background Information

Table 3 shows the descriptive statistics of interviewees. The interviewees were largely men with only one woman. The interviewees were drawn from various

stakeholder groups (apprentice, trainers, and training providers) involved in the craftsperson apprenticeship. Regarding the craftspeople, 22.5% of the interviewees are bricklayers, and 15% are electricians. Concerning the type of training schemes attained by the respondents, the majority had informal training schemes (57.5%). Most of the interviewees were completers (67.5%), while the remaining 32.5% of the participants were non-completers, including the only female respondent.

Furthermore, the distribution of respondents by the level of education showed that most of the respondents (42.5%) were junior secondary school graduates. A large portion (95%) of the respondents have more than six years of work experience. Additional information on the other stakeholders, i.e., trainers and training providers, are provided in Tables 3 and 4.

S/N	Interviewee code	Trade/Position	Interviewees	Years of experience	Type of training scheme
Apprentice					
1	AP01	Electrical electrician	Completer	7	Formal
2	AP02	Architectural draftsmanship	Completer	12	Formal
3	AP03	Bricklaying and masonry	Completer	6	Informal
4	AP04	Carpentry	Completer	12	Formal
5	AP05	Painting and decoration	Non-completer	8	Formal
6	AP06	Plumbing	Non-completer	16	Informal
7	AP07	Plumbing	Non-completer	18	Informal
8	AP08	Wrought and iron design	Completer	12	Formal
9	AP09	Aluminum windows/doors	Completer	17	Formal
10	AP10	Paving stone installer	Completer	9	Informal
11	AP11	Tiling work	Completer	15	Formal
12	AP12	Masonry	Completer	19	Informal
13	AP13	Horticulturist plant breeding	Non-completer	16	Informal
14	AP14	Iron bending	Non-completer	22	Informal
15	AP15	Mechanical technician	Completer	12	Formal
16	AP16	Bricklaying	Completer	18	Informal
17	AP17	Iron bending	Non-completer	5	Formal
18	AP18	Electrical work	Completer	18	Formal
19	AP19	Carpentry	Non-completer	11	Informal
20	AP20	Masonry	Non-completer	19	Informal
21	AP21	Air conditioning work	Completer	16	Formal
22	AP22	Tiling work	Completer	11	Informal
23	AP23	Painting	Non-completer	4	Informal

24	AP24	Electrical work	Non-completer	16	Informal
25	AP25	Bricklaying	Non-completer	21	Informal
26	AP26	Aluminium fabricating work	Completer	14	Informal
27	AP27	Bricklaying and masonry	Completer	26	Informal
28	AP28	Plumbing	Non-completer	8	Formal
29	AP29	Carpentry	Completer	18	Informal
30	AP30	Bricklaying	Completer	14	Formal
31	AP31	Painting	Completer	28	Informal
32	AP32	Bricklaying	Completer	15	Formal
33	AP33	Electrical work	Non-completer	17	Informal
34	AP34	Mechanical technician	Completer	22	Formal
35	AP35	Bricklaying	Completer	10	Informal
36	AP36	Mechanical technician	Completer	18	Formal
37	AP37	Mechanical technician	Completer	17	Informal
38	AP38	Bricklaying and masonry	Completer	16	Informal
39	AP39	Painting work	Completer	21	Informal
40	AP40	Bricklaying and masonry	Completer	6	Informal
Training Providers					
41	SS01	Site Supervisor	Trainer	13	Informal
42	SS02	Site Supervisor	Trainer	16	Formal
43	TT01	Tutor	Trainer	12	Formal
44	TT02	Tutor	Trainer	23	Formal
45	AD01	Administrator	Trainer	18	Formal
46	AD02	Administrator	Trainer	12	Formal

Table 4. Respondents' background information

Barriers Responsible for the Non-completion of Construction Crafts Apprenticeship

Five barriers responsible for the non-completion of construction crafts apprenticeship were identified from the analysis of the interview transcripts. The barriers are (i) financial difficulties, (ii) bullying, (iii) lack of information about the content of the training programme, (iv) lack of interest, and (v) work-life balance.

Financial difficulties

The interviewees mentioned several reasons for the low completion rates of apprenticeship programmes in the construction sector. The study found that lack of finance is one of the reasons for the non-completion of construction

crafts apprentices. For instance, one of the interviewees [AP22] stated, "Due to instability to continue after school certificate examination; I had to get a job at an aluminium company." Also, another interviewee said that "I did not complete my training due to financial constraints" [AP38]. The tutors [TT01 and TT02] mentioned that trainees need money to (i) buy materials required for practical sessions and (ii) cover living costs. This evidence suggests that the trainees face financial difficulties during their apprenticeship.

This finding is consistent with that of Donkor (2012), who found financial hardship to be one of the reasons for non-completion among apprentices in Ghana. Characteristics of the study population may partly explain this consistency in the results. Ghana and Nigeria are developing countries. In Nigeria, apprentices do not receive any form of financial support, such as stipends, during the training period. However, the apprentice may receive financial support from family and friends. This lack of pay is in sharp contrast with the reality in the other countries. For instance, Daniel et al. (2020) showed that apprentices received stipends during the training period. The absence of financial benefits makes it difficult for apprentices to meet some of their essential needs. As one of the interviewees [AP38] put it: "I have no one to support me financially, and I have exhausted the little money I had with me. No pocket money, not to talk on transport money". This finding has practical implications. There is a need to provide financial incentives to apprentices during the training period. This income would help apprentices meet some of their needs, such as transportation costs, and improve completion rates.

Bullying

Some of the interviewees experienced some form of bullying or exploitation. One of the interviewees stated that "The only thing I did not like is that some of my colleagues use abusive language while at work" [A04]. Also, another interviewee mentioned that "Some trainees send newly signed-up trainees on personal errands" [AP08]. Both statements show that bully and exploitations tend to occur during the training process. This finding agrees with those reported in earlier studies (Snell and Hart, 2008; Donkor, 2012; Harris et al., 2001). For instance, Snell and Hart (2008) showed that bullying by peers, senior apprentices, and employers was one of the main reasons for the non-completion of apprenticeship in Australia.

Bullying and exploitation would have adverse effects on the well-being of trainees. Research has shown that bullying has a negative effect on mental health (Lereya et al., 2015), quality of life (Allison, Roeger, and Reinfeld-Kirkman, 2009), and drop rates (Townsend et al., 2008) among students. Apprentices would lose motivation to learn when their well-being is affected. This situation ultimately leads to apprentice attrition. It is imperative for trainers, training providers, and the government to provide and enforce laws targeted at discouraging bullying during apprenticeships.

Lack of information on the content of training programme

The investigation revealed that most of the apprentices had no clue about what the training process entailed when signing up for apprenticeships. For

instance, one of the interviewees said that "it is not easy to locate faults in conduit work" [AP06]. Also, the interviewee reported [AP06] that "working at height is difficult." These statements suggest that the interviewee had no clue about the content of the training programme. Daniel et al. (2020) asserted that there is a need to provide prospective trainees with more information about the content of the construction crafts training programme. This information provides prospective trainees with insights about what to expect during training. Also, prospective trainees may be given an opportunity to shadow other apprentices during the process of recruitment. Forsblom et al. (2016) showed that the strategies, such as job interviews and company visits, improved Switzerland's completion rates of apprenticeship programs. The period used for shadowing gives prospective insights into the training process and what to expect while on the job.

Work-Life Balance

The construction industry is labour intensive, which requires working for long hours under inclement weather conditions. Commenting on work-life balance, one of the interviewees said, "it is always about work" [AP36]. Another interviewee, when asked about this same issue, said: "You have to keep following instructions with little time to rest" [AP07]. This finding is not surprising at all. Due to improve project outcomes, it is common for construction managers to accelerate the rate of execution. This circumstance affects the work-life balance of construction workers.

This is consistent with findings reported in previous studies. For instance, Snell and Hart (2008) stated that there was too much focus on work during the training process. The lack of work-life balance has a negative effect on well-being of people (Yang et al., 2018). Also, research has shown that long work hours increase the intention to quit among employees (Holland et al., 2019). The findings of these previous studies highlight the importance of work-life balance among apprentices during their training. Training providers and on-the-job supervisors need to develop and implement strategies for maintaining work-life balance among trainees.

Determinants Facilitating Successful Completion of Construction Crafts Apprenticeship

Based on the analysis of interview transcripts, four determinants that facilitate the successful completion of construction crafts apprenticeship were identified. The determinants are: (i) personal interest and motivation; (ii) parental and family support, (iii) personality of trainer; and (iv) potential to earn income.

Personal interest and motivation

The interviewees acknowledged that personal interest helped the trainees stay motivated and complete the crafts apprenticeship. One of the interviewees, an electrician, said, "I am always happy when a job is complete, and the light comes on..." [AP13]. Also, another interviewee stated that "it was a personal choice to complete the training as none of my family members has ever done that before" [AP14]. These excerpts from these

interviews indicate that personal interest is vital for improving the outcome of construction crafts apprenticeship.

This result agrees with similar previous studies found in Harris et al. (2001) and Ogbuanya, Chukwu, and Orji (2020). For instance, Harris et al. (2001) showed that apprenticeship tends to complete the training when they have developed an interest in the trade. An empirical study by Laporte and Mueller (2013) reiterated the personal interest and love for the job increases the likelihood of completing the crafts training process. As training providers seek to recruit prospective trainees, it is important to develop strategies for identifying people interested in the trade. Apprentices may experience several difficulties during the training process. However, personal interest would ensure that apprentices stay motivated and improve the completion rates of the programmes.

Parental and family support

The level of support received from parents and family influences the completion rates of construction crafts apprenticeship programmes. For example, AP01 stated that: "*what motivated me the most was my uncle; I said earlier that I lived with him, one day he called me and said you need to learn a trade*." Another interviewee said*, "As I said earlier that my father is a carpenter, he motivated me in the trade*"[AP04]. These two statements show that parents and family influence career decisions among young people.

The finding emanating from this study corroborates the work, which has highlighted the importance of parental and family support. For instance, Harris et al. (2001) tend to complete their training if parents provide adequate support. The parents and family members could serve as role models for the trainee during the training period. Also, parents and families could provide financing to cover living and tuition costs. This is evident from the views expressed by AP01, who stated that "…my uncle really helped me to see that I finished my training, in terms of financial support" [AP01]. This finding suggests that family and friends provide tangible and intangible support to the apprentice during the training period.

Personality of Trainer

The results obtained in the current study showed that the trainer's personality influences the decision to complete the construction crafts apprenticeship. One of the interviewees stated, "He gave us listening ears; whenever we want to ask about something, they listen to us..." [AP04]. This statement suggests that the interpersonal skills of the trainer have an impact on the completion rates of construction crafts apprenticeship. Also, another interviewee mentioned that "My boss and co-workers assisted me during the training" [AP06]. One of the trainers [TT01] said that "…we counsel them and advise them". Surprisingly, the trainer's personality is one of the underlying factors contributing to improvements in the outcome of apprenticeship. This result has not been reported in previous studies.

Although previous studies have highlighted the importance of mentoring in apprenticeships (Daniel et al., 2019), no study has explicitly stated that the trainer's personality is important. However, it must be stated that there seems to be a relationship between the personalities of an individual and the desire to mentor others (Niehoff, 2006). In terms of personality characteristics, the literature indicates that influential mentors are patient, knowledgeable, pleasant, and interpersonally supportive to their mentees (Johnson, 2002). In Nigeria, construction crafts apprentices training is primarily provided via informal arrangements. Thus, the personality of the trainer would influence the outcome of the apprenticeship programme. Stakeholders, such as the government, could re-train experienced craftspeople to become influential mentors to trainees.

Potential to Earn Income

The study found that some participants cited the potential to earn an income made it easy to complete the construction crafts apprenticeship. For instance, AP07 stated that: "Acquiring a craft enables you to be self-sufficient as white-collar jobs are fast fading out" [AP07]. The site supervisor [SS01] mentioned, "people will continue to engage them". These excerpts show that the potential to earn an income through employment ensures that the trainees are motivated to complete their apprenticeship programmes. Following the results of this study, previous research has shown that post-apprenticeship pay has a significant impact on the intention to complete the training programme (Smyth and Zimba, 2019). In developing countries, youth

unemployment rates tend to be high. For instance, it was reported that the rate of youth unemployment in Nigeria was 29.7% in 2018 (National Bureau of Statistics, 2018). Due to rising unemployment rates, the potential to be self-employed upon completing an apprenticeship is attractive to trainees.

CONCLUSION

The current study seeks to explore the underlying reasons for the non-completion of construction craftspeople apprenticeship in Lagos state, Nigeria. Also, the study described the determinants of successful completion of construction craftspeople apprenticeship in Lagos state, Nigeria. This information is essential for developing strategies for improving outcomes of construction craft apprenticeship programmes. The study has shown that, financial difficulties, bullying, lack of information about the apprentice training programme, and absence of work-life balance are responsible for the non-completion of apprenticeship programmes. The second significant finding was that personal interest, parental and family support, the trainer's personality, and potential to earn income contribute to the successful completion of construction crafts apprenticeship. Taken together, these findings indicate that family and trainers play a crucial role in the construction craft apprentice training process.

The study adds to the body of knowledge on craftspeople apprenticeship in the construction sector in Lagos State, Nigeria. Also, the present study lays the groundwork for future research into construction apprenticeship in the construction sector of Nigeria. For instance, researchers could investigate the

impact of stipends provided by N-Power on completion rates of apprenticeship programmes. The exploratory nature of this study makes the findings less generalisable to a large population. Despite its limitations, the study offers some insights into factors responsible for the non-completion of apprenticeship training. These findings suggest a need for collaboration among all stakeholders (i.e., family, training provides, trainers, government, and employers) to improve the completion rates of construction crafts apprenticeship programmes.

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