Subcontracting Systems and Working Conditions in the Building Construction Industry in Lagos, Nigeria

Olasunmbo Ayanfeoluwa Olusanya & Oluwakemi Ayodeji Adewumi
Department of Employment Relations and Human Resource Management
University of Lagos, Akoka

Abstract
The mode and nature of employment is a major determinant of working conditions. Working conditions in subcontracting systems is a cause for concern on building construction sites. Therefore, this paper examines the relationship between subcontracting systems and working conditions of building construction workers in Lagos, Nigeria based on survey research design. The secondary and primary data used for the study were derived from systematic review of literature, and 908 respondents among informal sector building construction workers. Descriptive and correlational analysis was used to analyse the data. The findings show that building construction workers in Lagos State worked an average of 9 hours per day and 6 days a week. The findings indicate the prevalence of subcontracting with almost half of the respondents hired by subcontractors in the industry. The nature of employment contract for the workers was mostly verbal; their pay was inadequate to meet basic needs and they did not have flexibility on the job. Results also show a significant and inverse relationship between subcontracting systems and working conditions (r = -.107; P = 0.001). The study suggests that regulation of the practise of subcontracting by Government at the local level may result in improved working conditions. The paper, which is an important contribution to the body of work on subcontracting systems and working conditions suggests that verbal contracts should be enforceable to mitigate the challenges posed by subcontracting systems and facilitate better protection against adverse working conditions.

Keywords: *building construction, informal sector, Lagos State, subcontracting systems, working conditions*

Introduction

The working conditions of informal building construction workers including hours and days of work, pay and flexibility on the job are determined by the

nature and mode of employment. Subcontracting systems in the building construction industry is the means by which workers are engaged for a short period of time when their skills are required on the building construction site. Many workers in the building construction industry are engaged through subcontracting systems, which is construed in this paper as the process by which a contractor or project owner engages a firm or an individual to undertake certain tasks for the execution of a building construction contract or project. The implication of these layers of authority and responsibility involving project owner, contractor, subcontractor and workers make the determination and nature of working conditions in subcontracting systems a cause for concern.

The construction industry is at the vanguard of economic development in any country particularly because its role in the building of infrastructure is central to the process of development. Hence, the potential of the industry in the engagement of an army of workers who may otherwise be unemployed is of particular interest for the study of employment trends and working conditions. Organised contracting of construction in Nigeria has been traced to the 1940s and its steady growth has been attributed to the oil boom in the 1970s; the industry grew by 11.97% in 2009 and 12.09% in 2010 (Isa, Jimoh & Achuenu, 2013). The industry contributes 60 percent to total capital investment, about half to total stock of fixed capital investment and 30 percent to the Gross Domestic Product (Olaloku, 1987; Olowo-Okere, 1985). Hence, the potential contribution of the industry to development cannot be overemphasised.

However, the share of Foreign Direct Investment (FDI) in building construction declined from 2.50 billion in 2000 to 2.20 billion in 2008 (Oyedele, 2013; Mbamali & Okotie, 2012). It is pertinent to point out that this may have negative implications for working conditions in the building construction industry. This is because the building industry is capital intensive and requires huge capital that may sometimes not be available within the economy (OECD, 2002). Therefore, a decline in flow of FDI cannot be favourable to the industry.

De Souza (2000) observed that the construction industry could absorb different categories of persons, including a large proportion of the working poor who have little or no formal educational qualifications. Nevertheless, the working conditions in building construction cannot be ignored because there can be no building construction without human beings, even with the use of machines. Thus, a study of working conditions in the construction industry is necessary in Nigeria, given the fact that construction workers in less developed countries are more prone to

accidents, and endure much poorer terms and conditions of work than workers in the developed countries. Also, limited opportunities for skill acquisition necessary for the development of the industry are also noticeable in less developed countries (Wells, 2001). The objective of this paper is, therefore, to establish if there is a relationship between subcontracting systems and working conditions of building construction workers in informal settings.

Literature Review

Subcontracting systems in this study comprise the interrelations involved in engaging subcontractors and workers to execute specific tasks at various stages of the building construction process. Subcontracting is entrenched in the construction process and subcontractors supply the necessary skills and workers for construction work. This is because the fragmented and specialised nature of construction work necessitates the engagement of different skills required at different times in the construction process (International Labour Organisation [ILO], 2001). Thus, subcontracting system and subcontractors have an important place in the construction industry (Azari-Rad, Philips & Thompson-Dawson, 2014; Enshassi, Choudhry, Mayer & Shoman, 2008; Fagbenle, Makinde & Oluwunmi, 201l). However, the working conditions of workers engaged in subcontract systems have not been adequately covered in literature. Working conditions is an important element of the employment relationship irrespective of the nature of employment and workers are especially concerned about these conditions. Working conditions is construed in this paper as the nature of contract, training requirement for a job, adequacy of pay, flexibility of work time, hours of work and days of work.

Ukaegbu (2000) examines the relationship between working conditions and employee commitment in 20 indigenously owned private manufacturing firms in South-Eastern Nigeria and found that many workers were displeased with extrinsic and equity factors of their work. This demonstrates the degree of importance that workers attach to working conditions. In a similar context, Aworemi, Abdul-Azeez and Durowoju (2011) in a study of fifteen (15) organisations in South-Western Nigeria found that good working conditions was considered the best motivator for the employees surveyed. While these studies have covered workers in formal settings this study examines building construction workers in informal settings.

From a study of casualisation and work degradation in five (5) organisations selected from oil and gas, banking, and telecommunications industries in Nigeria,

Fapohunda (2012) noted that casualisation of labour is at variance with the doctrine of full employment. The study found that contract workers compared to permanent workers are deficient in these ways: denial of right to organise and benefit from collective agreements, and exposure to exploitation by employers. The findings of this study indicate that workers engaged in subcontract situations or on casual basis are likely to be exploited by their employers making them susceptible to unfavorable working conditions. This necessitates the examination of categories of workers who are vulnerable to exploitation being outside the formal protection of the law.

It has been argued that subcontracting systems provide an important platform for employers to reduce cost of doing business, particularly cost of maintaining the workers. However, Kalejaiye (2014) noted that it is doubtful that organisations that employ workers on casual basis are able to save costs through the practice and argued that a nation like Nigeria which is concerned about economic development and social advancement ought to consider the terms and working conditions of its workers seriously.

Conversely, Lin (2003) observed that the highly segmented subcontracting structure in the construction industry serves as a buffer against risk, helps to reduce operating costs, secure competitive advantage and offer opportunity for maximising profit. This is so because subcontractors are often required to bid for jobs and the contracting firm tend to select subcontractors with the lowest cost and acceptable quality. The question that arises from this is: what is the implication of these gains for the working conditions of building construction workers in informal settings? In this connection, the paper answers this question and tests the hypothesis, which states that: there is no significant relationship between subcontracting systems and working conditions of building construction workers in informal settings.

Methods

This cross-sectional study was conducted in Lagos State, Nigeria and adopted a survey research design. Survey research design is a descriptive research method used to select a representative sample from a pre-determined population for the purpose of collecting a relatively small amount of data, which is useful in drawing inference from the whole population (Kelley, Clark, Brown, & Sitzia, 2003; Lynn, Erens & Sturgis, 2012; Schell, 1992; Mathiyazhagan & Nandan, 2010). The survey method is appropriate for the study because the building construction sites

studied were active at the time of study. That is, the data was not examined retrospectively.

The population for this study comprised building construction workers in Lagos State including Carpenters, Blocklayers, Iron-Benders, Welders, Labourers, Machine Operators, Electricians, Plumbers, Plasterers, Painters and Tilers. These categories of workers usually undergo craftmanship training in workshops and on building sites as they work to acquire necessary skills to practice their craft. Individuals or organisations employ some of these workers while some are self-employed. A portion of those who are self employed operate from a location or 'workshop' while some congregate on the sides of major roads and construction materials market in the hope that potential clients would find and engage them to work on construction sites. However, as at the time this study commenced, the total number of building construction workers in Lagos State could not be ascertained. This is because a large segment of workers in the industry operate informally and are unorganised.

This may be attributed in part to the supply of labour from different geographical locations within and outside Nigeria only for the duration of specific building construction project. The study population therefore comprised workers on approved building construction sites in Lagos State. The sampling frame consist of the total number of workers on building construction sites with approved building plans in Lagos State, from twenty (20) districts in five (5) Administrative Divisions (Ikeja, Lagos, Ikorodu, Badagry and Epe) and accessed through the total number of building plans approved by the Lagos State Physical Planning Permit Authority between 2007 and 2013. This data gave information on sites that were active at the time of the survey. This study adopted Yamane's (1967) formula to determine the sample size of 388 building construction sites.

The questionnaire, which measured subcontracting systems (identification of employer, responsibility for project monitoring for quality and timely delivery of projects) and working conditions (nature of contract, pay, flexibility of job, hours and days of work) was administered to ten percent of workers in each of the selected three hundred and eighty-eight building construction sites in Lagos State. This produced 908 respondents selected using stratified and simple random sampling technique. The data was analysed using descriptive and correlational analysis in SPSS version 20.0. A reliability test using Cronbach Alpha showed a reliability coefficient of 0.722. This is adequate and implies that the findings of

this study may be replicated under the same conditions (Boermans & Kattenberg, 2011; Wells & Wollack, 2003).

Findings and Discussions

Table 1 shows the sex, education and marital status of informal building construction workers in Lagos State. There is a significant gender difference amongst the respondents as 94.4 percent of them were male. This shows that the building construction is a male dominated industry. The gender differentials may be attributed to the level of energy that is required in the building construction process, which makes work in the industry most suited for the male gender (Jacka, 1997; Prasad, 2015). However, the highest proportion of female respondents (2.6 percent) is found in Ikorodu Administrative Division. Thus, from statistical inference there are more women available to work in the building construction industry in Ikorodu.

This sharp gender difference shows an alignment with the situation in Alberta, Canada (Alberta Authorities, 2013). There is an indication that there were relatively more women (4.4 percent) who work in building construction in the suburbs than at the centre of Lagos State (1.2 percent). Against this backdrop, Scullen (2008) suggested that by the end of 2010, especially in male dominated industries, a large portion of the new entrants to the workforce would be women and that the ability of a nation or organisation to compete in the global economy or remain competitive, would depend on the extent to which women were integrated meaningful into skilled trades.

Additionally, many of the respondents (60.4 percent) had secondary school education and more than half of the respondents were married (58.7 percent). The high proportion of married individuals in the building construction industry reveals that most of the workers had responsibilities requiring that they continue to work to earn a living. Furthermore, the period of unemployment between jobs as presented in Table 4 reveal that most of the workers (91.3 percent) stay a month or less than a month between jobs and this may have implications for ability to convince a potential employer of competence and subsequent offer of a job.

Table 1: Socio-demographic Characteristics among Building Construction Workers

Variable	Percentage					
	Ikeja (34.0)	**Lagos (29.1)**	**Ikorodu (21.0)**	**Badagry (12.8)**	**Epe (3.1)**	**Total (100)**
Sex						
Male *(n = 857)*	32.9	29.0	18.4	11.8	2.3	**94.4**
Female *(n = 51)*	1.1	0.1	2.6	1.0	0.8	**5.6**
Total	**34.0**	**29.1**	**21.0**	**12.8**	**3.1**	**100**
Highest level of Education						
Primary School *(n = 241)*	14.0	3.5	5.3	2.2	1.5	**26.5**
Secondary School *(n = 548)*	18.5	22.4	11.0	7.2	1.3	**60.4**
Technical College *(n = 72)*	1.2	1.5	3.4	1.5	0.2	**7.9**
No Education *(n = 47)*	0.3	1.7	1.3	1.9	0.0	**5.2**
Total	**34.0**	**29.1**	**21.0**	**12.8**	**3.1**	**100**
Marital Status						
Single *(F = 353)*	20.2	10.7	5.0	2.4	0.7	**38.9**
Married *(F = 533)*	13.7	18.4	15.1	9.6	2.0	**58.7**
Divorced/Separated/Widowed *(F = 22)*	0.2	0.0	1.0	0.8	0.4	**2.4**
Total	**34.0**	**29.1**	**21.0**	**12.8**	**3.1**	**100**
Period of unemployment between jobs	14.9	16.6	15.9	9.8	1.7	58.8
Less than One Month *(n = 534)*	15.9	7.8	5.0	2.8	1.1	32.5
	1.8	2.4	0.1	0.1	0.2	4.6
One Month *(n = 295)*	0.6	1.3	0.0	0.1	0.1	2.1
Two Months *(n = 42)*	1.0	0.9	0.1	0.0	0.0	2.0
Three Months *(n = 19)*	**34.0**	**29.1**	**21.0**	**12.8**	**3.1**	**100**
More than Three months *(n = 18)*						
Total						

The data presented in Table 2 shows that half of the respondents earn an average of about ₦3,500 per day. Similarly, their average income per month is about ₦78,000, with 50 percent earning up to about ₦80,000. The wage is relatively low, given lack of access to other benefits or protection against hazards on the job. Grimshaw (2013) explains that it is necessary for wages in the construction industry to be above the statutory minimum because of the strenuous nature of construction work. Also, 50 percent of the workers are aged 30 years and have an average of three dependants. This average age provides evidence for Levy (1990) that it is difficult to attract young workers in Japan, for instance, but that illegal workers readily take on jobs with low pay.

An average of three employers within six months shows the frequency of workers' movement from one site to another. This further strengthens the case for subcontracting systems in the building construction industry, considering the short-term nature of skill requirement on sites (Schurman & Eaton, 2013). That is, employees are often retained for the duration of contract only, despite possession of requisite capabilities.

Table 2: Socio-Economic Characteristics among Building Construction Workers

Variable		ACTUAL					
		Ikeja	**Lagos**	**Ikorodu**	**Badagry**	**Epe**	**Total**
***Income Per Day* (₦)**	Mean	2962.72	3708.64	3714.66	3965.52	3640.74	**3497.03**
	Median	3000.00	4000.00	4000.00	4000.00	4000.00	**3500.00**
***Income per month* (₦)**	Mean	59230.77	60285.71	78732.98	85870.69	68574.07	**77838.58**
	Median	40000.00	50000.00	80000.00	90000.00	66000.00	**80000.00**
Age	Mean	28.98	30.64	33.13	33.84	32.61	**31.07**
	Median	29.00	30.00	32.00	33.50	33.00	**30.00**
No of Dependants	Mean	2.13	3.14	3.96	4.22	4.50	**3.15**
	Median	2.00	3.00	4.00	4.00	4.00	**3.00**
No of Employers in the last 6months	Mean	3.78	2.30	4.26	3.02	3.39	**3.34**
	Median	4.00	2.00	3.00	2.00	3.00	**3.00**

Source: Survey (2015).

Table 3 depicts the actors in the subcontracting systems in the building construction industry, including identity of hirer, distinction between hirer and employer as well as responsibility for quality control and timely delivery of work on site. The findings in Table 3 show that the subcontractor hired 44.6 percent of the respondents, while the contractor hired 35.9 percent. This finding indicates that subcontracting systems exist in the building construction industry in Lagos State, as suggested by Fagbenle, Makinde and Oluwunmi (201l). Wells (2006) however cautioned against subcontracting mainly because the drive at minimisation of labour costs and overheads could have adverse influence on workers' welfare.

In addition, 14.9 percent of the respondents are hired directly by the owner of the building although 'other' hired a small proportion (4.6 percent), which could be either site engineers or site supervisors. A hirer, in this instance, is distinct from an employer in that the hirer is usually the individual whom the worker has first contact with and from whom the worker gets the offer of job. Whereas the

employer controls and directs the worker in line with verbal, written or implied contract for work and is obligated to pay wages for work done. A majority of the respondents (89.1 percent) affirm that their hirer is their employer, while 10.9 percent affirm that the individual that hired them is not their employer. Also, the split between those hired by the subcontractor and the contractor reveal multi-layered subcontracting systems in the study area. Thus, the layers of subcontracting could involve site engineers and supervisors, contractors, subcontractors and workers. This confirms the observations of Hiatt (2007) and K'Orinda-Yimbo (2008) about layers of subcontracting in Nigeria.

Similarly, the responsibility for quality control is attributed to the subcontractor, as noted by 40.0 percent of the respondents. Also, 34.9 percent attribute quality control to the contractor, while 14.1 percent attribute it to the owner. However, 11.0 percent affirm that quality control was done by neither the subcontractor, the contractor nor the owner, indicating that the site engineer or supervisor, who could be a representative of the owner, contractor or subcontractor, depending on the scale of the project, is responsible for quality control of work done on site. Equally, 38.2 percent credit the responsibility for timely delivery of work on site to the subcontractor; 34.8 percent to the contractor; 15.1 percent to the owner and 11.9 percent credit this responsibility to some other individuals. This shows layers of contracting and the central roles of the contractors and subcontractors in the building construction industry.

Table 3: Subcontracting Systems in the Building Construction Industry

Variable	Percentage (%)					
	Ikeja (34.0)	**Lagos (29.1)**	**Ikorodu (21.0)**	**Badagry (12.8)**	**Epe (3.1)**	**Total (100)**
Hirer						
Subcontractor *(n = 405)*	19.4	9.3	7.5	6.4	2.1	44.6
Contractor *(n = 326)*	13.2	13.5	6.2	2.6	0.3	35.9
Owner *(n = 135)*	1.4	5.4	5.3	2.6	0.1	14.9
Other *(n = 42)*	0.0	0.9	2.1	1.1	0.6	4.6
Total	**34.0**	**29.1**	**21.0**	**12.8**	**3.1**	**100**
Hirer same as Employer						
Yes *(n = 809)*	27.3	28.4	18.8	11.9	2.6	89.1
No *(n = 99)*	6.7	0.7	2.2	0.9	0.4	10.9
Total	**34.0**	**29.1**	**21.0**	**12.8**	**3.1**	**100**
Responsibility for quality control						
Subcontractor *(n = 363)*	10.0	15.5	7.8	4.5	2.1	40.0
Contractor *(n = 317)*	22.4	7.2	4.3	1.1	0.0	34.9
Owner *(n = 128)*	1.7	5.0	4.7	2.8	0.0	14.1
Other *(n = 100)*	0.0	1.4	4.2	4.4	1.0	11.0
Total	**34.0**	**29.1**	**21.0**	**12.8**	**3.1**	**100**
Responsibility for timely delivery of work						
Subcontractor *(n = 347)*	9.5	16.4	6.4	3.9	2.1	38.2
Contractor *(n = 316)*	22.7	6.4	4.2	1.4	0.1	34.8
Owner *(n = 137)*	1.9	5.1	5.0	3.2	0.0	15.1
Other *(n = 108)*	0.0	1.2	5.5	4.3	0.9	11.9
Total	**34.0**	**29.1**	**21.0**	**12.8**	**3.1**	**100**
Duration of job on each site						
Days *(n = 31)*	1.4	0.7	0.8	0.4	0.1	3.4
Weeks *(n = 296)*	10.2	7.4	7.0	6.9	1.0	32.6
Months *(n = 520)*	21.7	17.2	12.1	4.7	1.5	57.3
Years *(n = 58)*	0.7	3.6	1.1	0.6	0.4	6.4
Others *(n = 3)*	0.0	0.2	0.0	0.1	0.0	0.3
Total	**34.0**	**29.1**	**21.0**	**12.8**	**3.1**	**100**

Source: Survey (2015).

Working Conditions in the Building Construction Industry

Tables 4 and 5 show findings on the working conditions of building construction workers. The findings in Table 4 confirm that most of the contracts of

employment in the building construction industry was verbal (98.2 percent). Verbal agreements may easily be flouted when the desire to pursue self-interest is much stronger than the desire for decency and moral uprightness (Lippiatt, 2017). The pursuance of self-interest and desire to reduce the cost of engaging and maintaining employees may invariably lead to poor working conditions. Table 4 also reveals that more than half of the workers (69.9 percent) affirmed that their pay was inadequate to meet basic needs. Also, 68.4 percent confirmed that they were not in control of the time spent on each job; although 31.6 percent that cannot be ignored believed that they had control over the time spent on each job.

Table 5 shows that a worker worked an average of 9 hours per day, with 50 percent working, at least, 6 days a week after spending three years in training prior to seeking job in construction. This finding indicates that workers having undergone training for the job worked long hours and almost all week, thereby taking advantage of available work.

Table 4: Working Conditions among Building Construction Workers

Variable	Percentage (%)					
	Ikeja (34.0)	**Lagos (29.1)**	**Ikorodu (21.0)**	**Badagry (12.8)**	**Epe (3.1)**	**Total (100)**
Nature of employment contract						
Verbal *(n = 892)*	32.9	28.6	20.9	12.7	3.1	98.2
Written *(n = 13)*	1.1	0.3	0.0	0.0	0.0	1.4
No Agreement *(n = 3)*	0.0	0.1	0.1	0.1	0.0	0.3
Total	**34.0**	**29.1**	**21.0**	**12.8**	**3.1**	**100**
Adequacy of pay to meet basic needs						
Yes *(n = 273)*	16.0	11.1	1.8	1.1	0.1	30.1
No *(n = 635)*	18.1	18.0	19.3	11.7	3.0	69.9
Total	**34.0**	**29.1**	**21.0**	**12.8**	**3.1**	**100**
Flexibility of job						
Yes *(n = 287)*	8.5	4.1	11.3	6.5	1.2	31.6
No *(n = 621)*	25.6	25.0	9.7	6.3	1.9	68.4
Total	**34.0**	**29.1**	**21.0**	**12.8**	**3.1**	**100**

Source: Survey (2015).

Table 5: Averages – Working Conditions among Building Construction Workers

Variable		ACTUAL					
		Ikeja	**Lagos**	**Ikorodu**	**Badagry**	**Epe**	**Total**
Hours Worked Per day	Mean Median	8.68 9.00	8.20 8.00	8.27 8.00	8.36 8.00	9.68 10.00	**8.45** **8.00**
No of Days worked per week	Mean Median	6.05 6.00	5.79 6.00	5.76 6.00	5.71 6.00	5.61 6.00	**5.86** **6.00**
Duration of Training in months	Mean Median	34.30 36.00	31.88 36.00	28.18 36.00	30.72 36.00	41.79 36.00	**32.08** **36.00**

Source: Survey (2015).

Test of Hypothesis

In order to test the hypothesis, which states that there is no significant relationship between subcontracting systems and working conditions of building construction workers in informal settings, correlation analysis was carried out. The result in Table 6 shows a statistically significant and inverse relationship between subcontracting systems and working conditions ($r = -.107$; $P = 0.001$). This suggests that regulation of the practise of subcontracting by Government at the local level may result in improved working conditions. Also, the informalisation of employment relationships produces adverse working conditions in the building construction industry (Juravich, Ablavsky & Williams, 2015). This reinforces the statistically significant result, in that workers take on jobs "*without a contract, for cash, for an employer they often cannot name, and without any benefits or the basic protections provided by law*" Thus, if verbal contracts are enforceable, and subcontracting systems monitored more closely, then workers may be better protected against adverse working conditions.

Table 6: Relationship between Subcontracting Systems and Working Conditions in the Building Construction Industry

Variables	Subcontracting Systems	Working Conditions
Subcontracting Systems		
Pearson Correlation	1	-.107**
Sig. (2-tailed)		.001
N	908	908
Working Conditions		
Pearson Correlation	-.107**	1
Sig. (2-tailed)	.001	
N	908	908
**. Correlation is significant at the 0.001 level (2-tailed).		
Standardised coefficients (Beta): -.107		

Summary of Findings

The findings of this study show that there were more male than female in the building construction industry and that contracts of employment were verbal. The findings reveal that many of the workers attained senior secondary school and were married. The results also show that the workers stayed unemployed for about a month between jobs and worked on each site for months. The workers, many of whom were in their late twenties and early thirties claimed that their pay was inadequate and that their job was not flexible. The results indicate that women workers in the industry were more in the suburbs of Lagos State and that workers compensated for irregularity of work by working long hours on site. The discoveries on hirer, employer and distribution of responsibilities on site also reveal that subcontracting systems exist in the industry. The results of hypothesis testing show an inverse relationship between subcontracting systems and working conditions.

Conclusions and Recommendation

This study examines the relationship between subcontracting systems and working conditions in the building construction industry in Lagos, Nigeria. The study observes that the physical demand of building construction work may account for male dominance in the industry. In addition, the verbal contract of employment makes the agreement vulnerable to being contravened. The attainment of secondary school leaving certificate by many of the respondents indicates that most of the workers have some capacity for formal education. Also, the high proportion of married individuals in the industry reveals that most of the workers had responsibilities requiring that they continue to work to earn a living

regardless of the conditions. Staying unemployed for about a month before finding work on another site is indicative of the fact that employment is not exactly scarce for building construction workers in informal settings in Lagos State. The inadequacy of wage to meet basic needs may be a result of lack of access to other benefits or protection against hazards on the job, which has to be provided by the worker. The study has also demonstrated layers of contracting and the central roles of the contractors and subcontractors in the study area. This study therefore suggests that verbal contracts should be enforceable to mitigate the challenges posed by subcontracting systems and facilitate better protection against adverse working conditions. The study also recommends that subcontracting systems should be monitored and regulated more closely by the Government at the local level to ensure acceptable working conditions for workers in informal settings in the building construction industry in Lagos State.

Limitation of Study and Suggestions for Further Studies

A limitation of this study is the non-availability of data on total number of building construction workers at the time of the survey. As a result, the study utilises data on approved building plans to determine active sites and randomly selected the sample from those sites. However, Government in the Local Areas who are the closest to building construction workers in informal settings may gather relevant data, which can then be collated across the state and used for further research. Also, the varying number of workers on sites, some large and some few at the time of the survey, was a challenge. But, the study ensured representative distribution of the population through random selection of a large sample from five Administrative Divisions in Lagos State. Furthermore, this study has not considered other constructs that may be applicable to building construction workers in formal settings. Nevertheless, the findings of this study represent important contributions to the understanding of working conditions of building construction workers in informal settings in Lagos State, Nigeria.

References

Alberta Authorities (2013). *Industry profiles: Construction industry*. Retrieved from eae.alberta.ca/documents/profiles/industry-profile-construction.pdf

Aworemi, J. R., Abdul-Azeez, I. A., & Durowoju, S. T. (2011). An empirical study of the motivational factors of employees in Nigeria. *International Journal of Economics and Finance, 3*(5), 231-232.

Azari-Rad, H., Philips, P., & Thompson-Dawson, W. (2014). Subcontracting and injury rates in construction. *Employment Relationships in Construction*, 240-247. Retrieved from index.php/LERAMR/article/.../1281

Boermans, M. A. & Kattenberg, M. A. C. (2011). *Estimating reliability coefficients with heterogeneous item weightings using Stata: A factor-based approach.* Discussion Paper Series nr: 11-19, Tjalling C. Koopmans Research Institute.

De Souza, U. (2000). *Managing workers in production: Overview of labour in the building industry*. Translation of a presentation (TG-007), University of São Paulo.

Enshassi, A., Choudhry, R. M., Mayer, P. E., & Shoman, Y. (2008). Safety performance of subcontractors in the Palestinian construction industry. *Journal of Construction in Developing Countries, 13*(1), 51-62.

Fagbenle, O. I., Makinde, F. A., & Oluwunmi, A. O. (2011). Factors influencing construction clients'/contractors' choice of subcontractors in Nigeria. *Journal of Sustainable Development, 4*(2), 254-259.

Fapohunda, T. M. (2012). Employment casualisation and degradation of work in Nigeria. *International Journal of Business and Social Science* 3(9), 263.

Grimshaw, D. (2013). *Minimum wages, pay equity, and comparative industrial relations*. New York, USA: Routledge.

Hiatt, W. (Ed.). (2007). *A game as old as empire: The secret world of economic hit men and the web of global corruption.* California, USA: Berrett-Koehler Publishers Inc.

International Labour Organisation (2001). *The construction industry in the twenty-first century: Its image, employment prospects and skills requirement*. Geneva: International Labour Office.

Isa, R. B., Jimoh, R. A., & Achuenu, E. (2013). An overview of the contribution of construction sector to sustainable development in Nigeria. *Net Journal of Business Management, 1*(1), 1-6.

Jacka, T. (1997). *Women's work in rural China: Change and continuity in an era of reform*. United Kingdom: Cambridge University Press.

Juravich, T., Ablavsky, E. & Williams, J. (2015). *The epidemic of wage theft in residential construction in Massachusetts*. UMASS AMHERST LABOUR

CENTRE. Retrieved from http://www.umass.edu/lrrc/uploads/textWidget/wysiwyg/documents/Wage_Theft_Report_by_Tom_Juravich,_Essie_Ablavsky_and_Jake_Williams.pdf

K'Orinda-Yimbo, A. (2008). *Darkest Europe and Africa's nightmare: A critical observation of the neighbouring continents*. USA: Algora Publishing.

Kalejaiye, P. O. (2014). The rise of casual work in Nigeria: Who loses, who benefits? *An International Multidisciplinary Journal, Ethiopia*, Serial No. 32, 8(1), 156-176.

Kelley, K., Clark, B., Brown, V., & Sitzia, J. (2003). Methodology matters: Good practise in the conduct and reporting of survey research. *International Journal for Quality in Health Care*, *15*(3), 261-266.

Levy, S. M (1990). *Japanese construction: An American perspective*. New York, USA: Van Nostrand Reinhold.

Lin, P. H. (2003). Decision support for subcontracting procurement based on multi-attribute utility theories. *Construction Research Congress*. doi: 10.1061/40671(2003)92

Lippiatt, G.E.M. (2017). *Simon V of Montfort & Baronial Government 1195-1218*. United Kingdom: Oxford University Press.

Lynn, P., Erens, B., & Sturgis, P. (2012). *A strategy for survey methods research strategy in the UK*. UK: ESRC Survey Resources Network. Retrieved from http://surveynet.ac.uk/srn/Vision%20for%20Survey%20Methods.pdf

Mathiyazhagan, T. & Nandan, D. (2010). Survey research method. *Media Mimansa*, *4*(1), 34-82. Retrieved from http://www.mediamimansa.com/14-15-16%20Issues/14A%20-%20vol.%204,%20No.%201%20english%20-%20PART%20_B.pdf

Mbamali, I. & Okotie, A. J. (2012). An assessment of the threats and opportunities of globalisation on building practise in Nigeria. *American International Journal of Contemporary Research*, *2*(4), 143-150.

OECD (2002). Foreign direct investment for development and maximising benefits. Office of Statistics. Retrieved 6th July 2018 from https://www.oecd.org/investment/investmentfordevelopment/1959815.pdf

Olaloku, F. A. (1987). The quantity surveyor, the second tier foreign exchange market and the construction industry in Nigeria: Options and challenges. *Journal of the Federation of Building and Civil Engineering Contractors in Nigeria*, *4*(1), 4-8.

Olowo-Okere, E. O. (1985). Construction industry in Nigeria. *Journal for Building and Civil Engineering Contractors in Nigeria*, *2*(2), 6–10.

Oyedele, O. A. (2013). Project financing for sustainable development of Nigerian cities. Abuja: FIG Commission Working Week Environment for Sustainability.

Prasad, P. (2015). *Crafting qualitative research: Working in the post-positivist traditions*. London: Routledge.

Schell, C. (1992). *The value of the case study as a research strategy*. UK: Manchester Business School. Retrieved from www.finance-mba.com/**Case**%20Method.pdf

Schurman, S. J. & Eaton, A. E. (2013). Trade unions organising workers "informalised "from above:" Case studies from Cambodia, Colombia, South Africa, and Tunisia. A report to the solidarity centre, Rutgers University.

Scullen, J. (2008). Women in male dominated trades: Its still a man's world. Prepared for the Saskatchewan Apprenticeship and Trades Certification Commission Retrieved from http://www.saskapprenticeship.ca/wp-content/uploads/2012/05/women_in_the_trades_FINAL20081.pdf

Ukaegbu, C. C. (2000). Working conditions and employee commitment in indigenous private manufacturing firms in Nigeria: Managing business organizations for industrial development. *The Journal of Modern African Studies, 38*(2), 295-324.

Wells, C. S. & Wollack, J. A. (2003). *An instructor's guide to understanding test reliability*. Retrieved from https://testing.wisc.edu/Reliability.pdf

Wells, J. (2001). *The construction industry in the twenty-first century: Its image, employment prospects and skill requirements*. Report for discussion at the Tripartite Meeting on the Construction Industry in the Twenty-first Century: Its Image, Employment Prospects and Skill Requirements. Geneva: International labour Office.

Wells, J. (2006). Labour subcontracting in the construction industries of developing countries: An assessment from two perspectives. *Journal of Construction in Developing Countries*. Retrieved from http://web.usm.my/jcdc/vol11_1_2006/2_Jill%20Wells(p.17-36).pdf

Williamson, O. E. (1981). The economics of organization: The transaction cost approach. *American Journal of Sociology, 87*(3), 548-577.

Yamane, T. (1967). *Statistics: An introductory analysis (2nd ed.)*. New York: Harper and Row.